FOR POSTAGE RATES SEE FRONTISPIECE

"TripleX" — the safety glass

THE SPHERE, JUNE 26, 1943
With which is incorporated "BLACK & WHITE" 1/6

# THE SPHERE

Vol. CLXXIII No. 2266 WITH WHICH IS INCORPORATED THE GRAPHIC JUNE 26 1943

KING SIX CIGARS
1/- each
MADE BY J. R. FREEMAN & SON, LTD
MAKERS OF FINE CIGARS SINCE 1839

McVITIE & PRICE
Biscuits of Highest Quality

"Cream of the Barley" is rare old Scotch Whisky
STEWART AND SON OF DUNDEE LIMITED
FOUNDED 1831

GREYS CIGARETTES
Just honest-to-goodness tobacco

BY APPOINTMENT TO H.M. THE KING
GAYMER'S CYDER
WM. GAYMER & SON, LTD., ATTLEBOROUGH, NORFOLK, ENG.

Grant's Scotch Whisky
"FAMOUS FOR HALF A CENTURY"

BRITAIN'S BEST BREW
Bass
TRADE MARK

You'll HEAR Better with 'ARDENTE'
The DEAF WORLD'S EARS
MRS. M. DENT'S Ardente FOR DEAF EARS
THE WORLD'S GREATEST HEARING SERVICE
CALL or Write for FREE TEST
COME AND HEAR HOW!
You too can enjoy the world of sound—at Church, Home, Business, Socially, in the war effort, and for your personal safety. SIMPLE, INCONSPICUOUS, INEXPENSIVE. Still obtainable—but restricted.
Mr. R. H. DENT, M.Inst.P.I., ARDENTE Ltd.
309 OXFORD ST., LONDON, W.1
Phones: MAYfair 1380—1718—0947

Most fires are caused by 'Careful' people
Don't just be careful—take *Extra* care

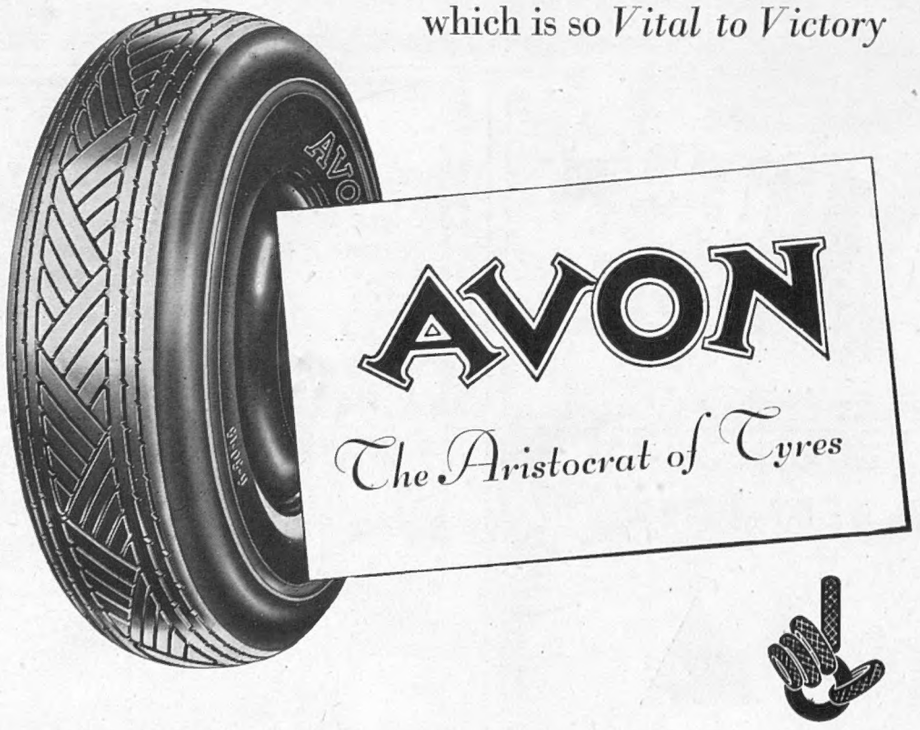
ONE SHILLING AND SIXPENCE
REGISTERED AS A NEWSPAPER FOR TRANSMISSION IN THE UNITED KINGDOM
Office: Commonwealth House, 1, New Oxford Street, London, W.C.1

# To AVOID rapid tread wear

## *you must* AVOID

**1** *Misalignment of wheels*
**2** *Incorrect inflation*
**3** *High speed and rapid acceleration*
**4** *Fast cornering*
**5** *Fierce braking*

All these waste rubber which is so *Vital to Victory*



Volume CLXXIII No. 2266 The SPHERE, London, June 26, 1943

THE SPHERE
With which is incorporated "THE GRAPHIC"
The Empire's Illustrated Weekly

**PANTELLARIA GIVES THE SIGNAL OF SURRENDER: A RECORD OF AN EVENT WITHOUT PRECEDENT IN MILITARY HISTORY. How the Italian Commander notified his surrender of the island to the Allied Forces without a single British soldier having set foot on the island**

Pantellaria surrendered on June 11, 1943: together with all the other Italian islands in the Sicilian Narrows, it is now in Allied hands. The surrender was the result of a period of continuous and intense bombardment by aircraft of the R.A.F., the American Army Air Force and the South African Air Force, supported by bombardment from the Allied Fleet. Two previous calls to surrender were ignored by the Island's Italian Commander: when he did decide to give in, it was as a result of the bombardments alone, as up till that moment no British soldier had yet set foot on the island. For the first time in history an enemy stronghold had been forced to yield by air power alone! The picture reproduced above shows how the news was communicated to the aircraft flying above the doomed island. The open space in the upper left hand is Pantellaria's big and modern airfield in the north of the island: marked out on its surface is the big white cross of surrender. All over the airfield are the craters where Allied bombs have fallen. A few minutes after this surrender signal had been given, landing-craft with Allied troops aboard were speeding in to take over the island and to make its garrison prisoners

Postage—Inland, 2d.; Canada and Newfoundland, 1d.; Elsewhere Abroad, 1½d.

# A WAR NEWSLETTER —No. 199

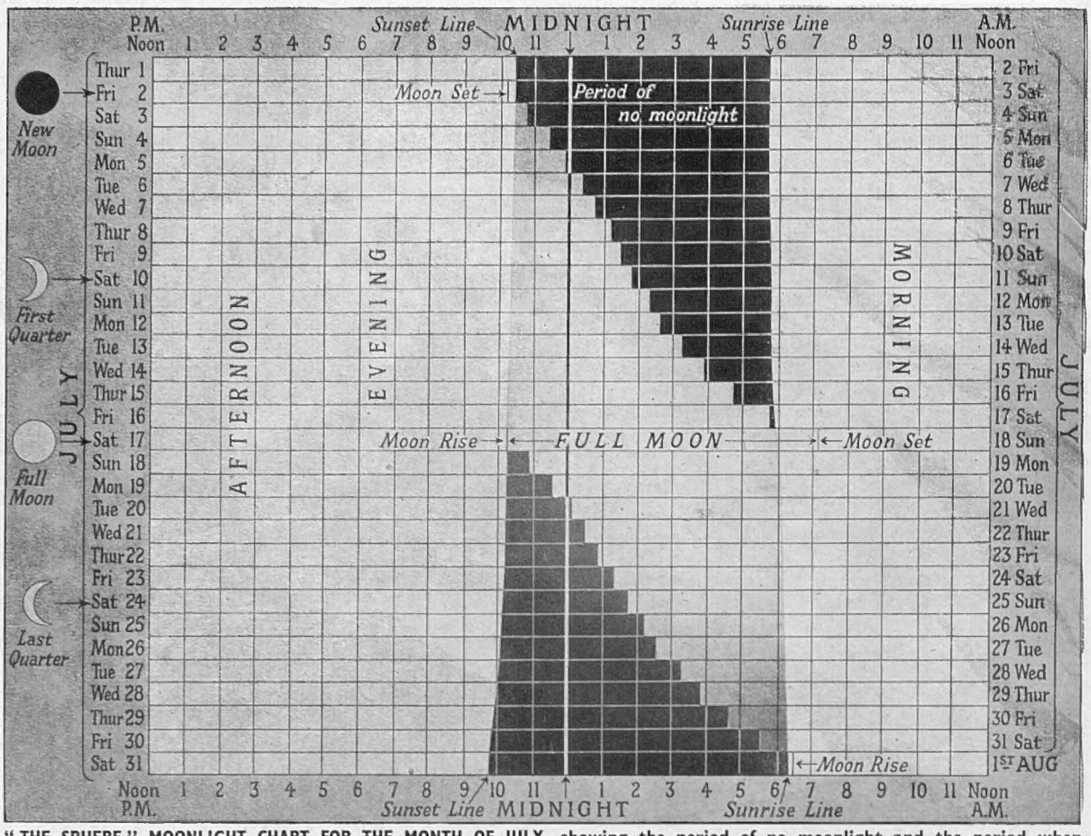
1, NEW OXFORD STREET, W.C.1.

## The King at the Front.—

The late King George V, who had but 20 miles of sea between England and the back of the Front, visited France six times in the four years of the old war. His son, King George VI, has been "paying his second visit to the Front," this time the North African Front. It is a somewhat misleading phrase, which does not take note of the difference in the conditions of the two world wars. King George VI may be said to have been at the Front almost continuously since the blitz of 1940 (which did not spare his London residence). (So has the Queen and, for that matter, the Princesses.) I had occasion a year or two back to examine and record the war service and functions performed by the late King George V between 1914 and 1919. It was an astonishing record of duty, endurance, service, inspiration, example and unfaltering faith in his Empire and peoples and cause. And when some biographer or historian examines the war record of the present King, he will find one which deserves the same encomium and evokes a like tribute of heartfelt praise and gratitude, and a sense of pride in our monarchy. I reread the other day Thackeray's *Four Georges*. I would not say the book is a great tribute to, or argument for, the monarchical system. But when some leading author produces his *Fifth and Sixth Georges*, he will have material enough for a Testament of Duty and a flaming testimonial to the Georges of the House of Windsor. For it is not too much to claim that no Kings of England ever reigned in times so difficult, dangerous and anxious, politically important and socially revolutionary, and that no two Kings ever rose to great occasions with a sense of duty so strong and so constant, with higher courage, more steadfast faith, more consistent selflessness. The fifth and sixth Georges, and their Queens, have put the British monarchy beyond the reach of political chances and changes for half a century to come. The proof of the pudding is in the eating.

## Pantellaria.—

The case of Pantellaria is not entirely conclusive of Mr. Churchill's dictum that it is "worth trying" whether air bombing alone can achieve the unconditional surrender of an invested fortress. The case of Pantellaria remains a non-proven verdict in its bearing on larger "fortresses." We are not quite certain whether stress of bombing or lack of water did the trick. We are entitled to conclude that a small fortress can hold out longer under intense and continuous bombardment if its civilian population (women, children, bouches inutiles) is negligible. If Pantellaria had had the civilian incubus of Malta, in ratio to its size, its capitulation would probably have come earlier. Geological and geographical features have an important bearing on resistance. The Isle of Wight would probably resist less long than an isle of its size with the physical features of Malta or Pantellaria. I spoke the other day of the world's pricking conscience about air bombing. It is perfectly fair comment. It was a bully's weapon which the Nazis patented. The observing world feels more than a sneaking sympathy with those (of whatever side) who put up a long resistance to it. The fineness of that resistance is judged by the weight and intensity of the bombing in relation to the size of the fortress. In the case of Lampedusa, a single day's stress of bombing proved sufficient to shatter the garrison's morale. The weight of bombs dropped on Pantellaria was enormous in relation to its size, and in terms of money hugely expensive. In terms of human life on both sides it was cheap. We needed Pantellaria and we have it now. We got it by what we believed to be the method quickest and cheapest in human lives. It is our firm determination to go on trying what that weapon can do to soften our enemies into accepting our own terms. We make no apology for using their patent or improving on it. We can leave the subject there.




**"THE SPHERE" MOONLIGHT CHART FOR THE MONTH OF JULY, showing the period of no moonlight and the period when the moon will be at its full**

*A limited number of these charts will be supplied free of charge on application to the Publisher, "The Sphere," Commonwealth House, 1-7 New Oxford Street, W.C.1, but 2½d. in stamps must be enclosed with the application*

## The Navy's Share.—

I sometimes think (and say) that the more we hear about the work of the Air Force, the more we are conscious of our ignorance in vital matters concerning the junior arm of the Services. R.A.F. publicity is enormous. Army publicity relatively slight. The silent service—whose functions even in modern war are much more intelligible to the general public—receive from the leaders of the State an occasional statistical acknowledgment of "business done," which is perhaps more revealing to the public than the non-stop running commentaries and glorification of the R.A.F., which the public sometimes finds as unintelligible as they are reiterative. Such an acknowledgment Mr. Churchill gave on June 12 to the Mediterranean Fleet for its part in the Tunisian victory. That Fleet, with its big and little ships and all its supplementary craft and devices, sank a total of 137 merchant and fighting ships of the Axis—a tonnage of 430,000, a percentage of 33 per cent. of the enemies' tonnage engaged in the African victory. In the same victory and period, the Allied losses amounted to 2¼ per cent. Among the kills were no fewer than twenty-one destroyers and T.B.s. It is true that without the R.A.F. there could have been no African victory, or Mediterranean victory. It is equally true that without the Navy, the essential co-operation of the R.A.F. would have been of no effect to enable our land forces to achieve the results they did, and will, achieve. It is equally true that without the R.A.F., a modern navy is vulnerable to impotence. In short, the Trinity of Services is one and indivisible. None is greater or less than another.

## Viceroy.—

The appointment of Sir A. Wavell to succeed Lord Linlithgow as Viceroy of India probably surprised many people, who were expecting a Cabinet choice and reshuffle. The supply of "detached" peers for this sort of job has long since proved inadequate—for many reasons. This great office under the Crown has grown continuously more arduous and less attractive, and Sir Archibald's term is likely to be one of peculiar difficulty. The appointment, on the face of it, is a good one. The new Viceroy is one of our most experienced soldiers and one of the most intellectual and highly educated. A thinker and a man of action, a philosopher, statesman and organiser, well-known to Indians as a strong and liberally-minded man, a great soldier, a great administrator, a man of understanding sympathy, but of unwavering firmness. (Historical parallel, perhaps the appointment of John Lawrence in 1863, though Lawrence was not a soldier.) His appointment is a happy choice. It coincides with the reseparation of the Indian and the Far Eastern military commands, and assures us that our supply of first-rate generals in the field is now once more so satisfactory that we can afford to employ one of them as an administrator. General Auchinleck receives a new post of importance which his merits, undimmed by a good deal of bad luck, justify. He, too, should be welcomed to high command by Indians.

## The Voice of Labour.—

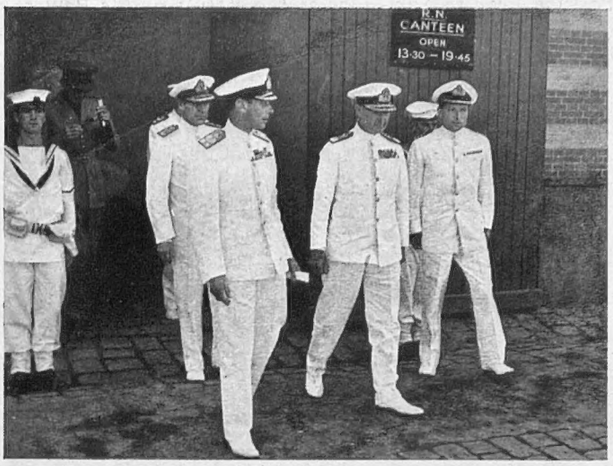
I listened for short periods to the voices of "Labour" speaking over the air at the Whitsun Conferences. The excerpts from such voices were short, and my listening was shorter. Perhaps properties in the ether lend an unnatural stridency and edge to those voices, though no hidden properties of the ether can account for the bathos and bromide of some of the pronouncements rescued by the B.B.C. Why *Labour?* Why this snobbish "class-distinction" which arrogates to Trades Union men the dignified title of "working man." I claim the right to that title for the Lord Archbishop of Canterbury, the Lord High Chancellor, and half the peerage. I claim it for myself and for my friends and neighbours. To hell with this snobbery practised by the Labour Party leaders! But, though I was chilled and alienated by the tinniness of their voices on the air and the tinsel of their excerpted arguments, I put those features down to mechanical failures, and I was not really chilled by the ferocity of the post-war iconoclasm which they propose to achieve. They are very solid for unity till this war is won. They are doing their damnedest to win it, and resisting many lures and giving up many cherished privileges to ensure victory (as are the dukes, and "capitalists" and "Tories"). And they are solid also in their determination to win fresh charters only by constitutional means and to have no truck with those who believe that only bloody revolution can bring such charters to fruition. The sanity and sense and essential patriotism of the (*soi-disant*) "working classes" redeem the fame of some of these ether voices, hissing petulance and the commonplaces of tub-thumping. I know very well that their bark is worse than their bite, and that they and those they speak for (more or less) are a part of the nation's backbone, of which Britain has cause to be proud. Potted politics and selected extracts on the air are like the recording van's pictures of battle—sorry stuff for judging the nature of a campaign, or the heart and purpose of a great nation, or the sense and patriotism of a great political party.

## Flaming June.—

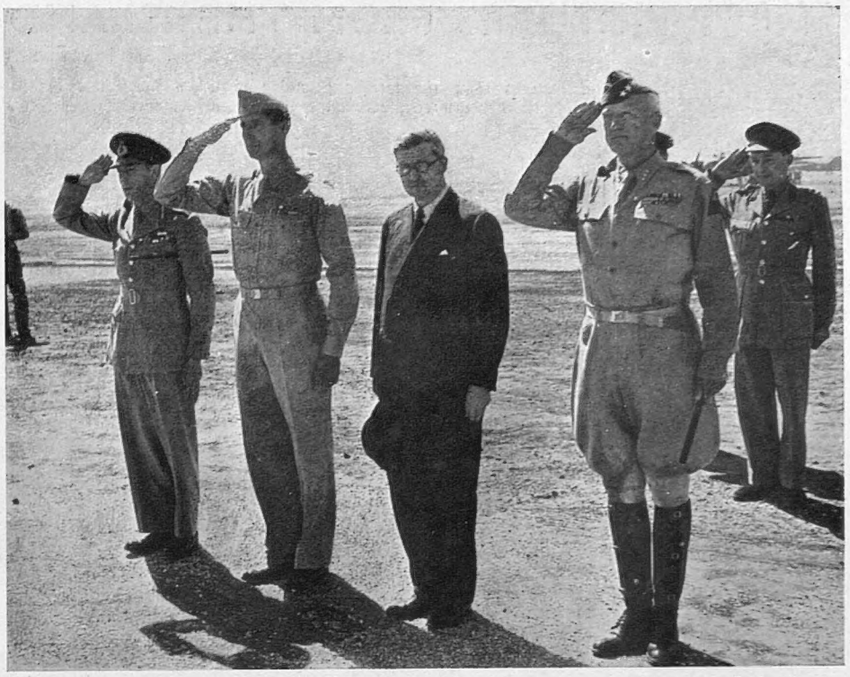
We paid for our fun. We always pay for weather bonuses. Our English weather-clerk is the Great Leveller, a perfect Woolton among rationers. You get your sweets of summer in April or June, and your winter austerity in June or April. The early days of June were *damnable*. Cold as conventional charity, wet and windy and changeable as a nasty April or an ill-tempered October, bad for hay-making, cruel for soft fruits, a paradise for slugs, snails, weeds and all parasites and pests. Even the bombers did not find it a very profitable period, though they did their best, like the slugs. I had only one consolation on June 1, 1943. My summer vests were in a more deplorable state of decomposition than my winter vests, and I felt no inducement to cast my winter clouts; or, indeed, to forego the old man's comforts, my hot-water bottle and a wood fire at night.

THE OLD STAGER

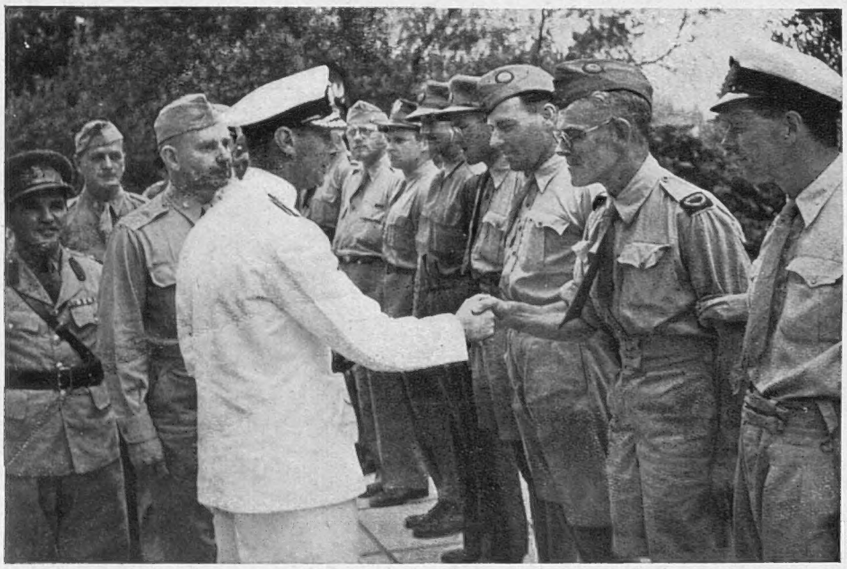
# The KING in NORTH AFRICA




**THE KING ATTENDS DIVINE SERVICE.** On Sunday, June 13 (the day after his arrival) the King went to church, the service being held in St. George's Chapel, on the second floor of a huge warehouse on Algiers waterfront which has been converted into a naval canteen. Some 500 or 600 bluejackets, in their summer white, were present. Before entering the chapel the King was introduced to a number of senior officers: above he is leaving with Admiral Sir Andrew Cunningham, C.-in-C.



**THE KING ARRIVES BY AIR to begin an extensive tour of the Army.** On June 14 his Majesty made an extensive tour of the American troops, which included a large force under the command of General Clark. It was during this visit that the King watched modern street fighting and then took the salute at a big parade, in which large numbers of soldiers and fighting vehicles passed in review. Above he is seen with General Clark, Sir James Grigg (Secretary for War) and Lieut.-General George S. Patton during the playing of the National Anthem



**INSPECTING THE MEN WHO REPORT THE NEWS—The King with some of the British war correspondents in North Africa:** On the afternoon of June 15, his Majesty met Allied Press representatives at Headquarters: the introductions were made by Brigadier McClure, Director of Public Relations, A.F.H.Q. Above, the King is shaking hands with Mr. Evelyn Montague, of the *Manchester Guardian*; other correspondents in the picture are—Mr. Edwin Tetlow, *Daily Mail* (extreme right); Mr. F. G. Gillard, of the B.B.C. (third from right); Mr. Alexander Clifford, *Daily Mail* (fourth from right); Mr. R. Miller, of *Newsweek* (sixth from right)

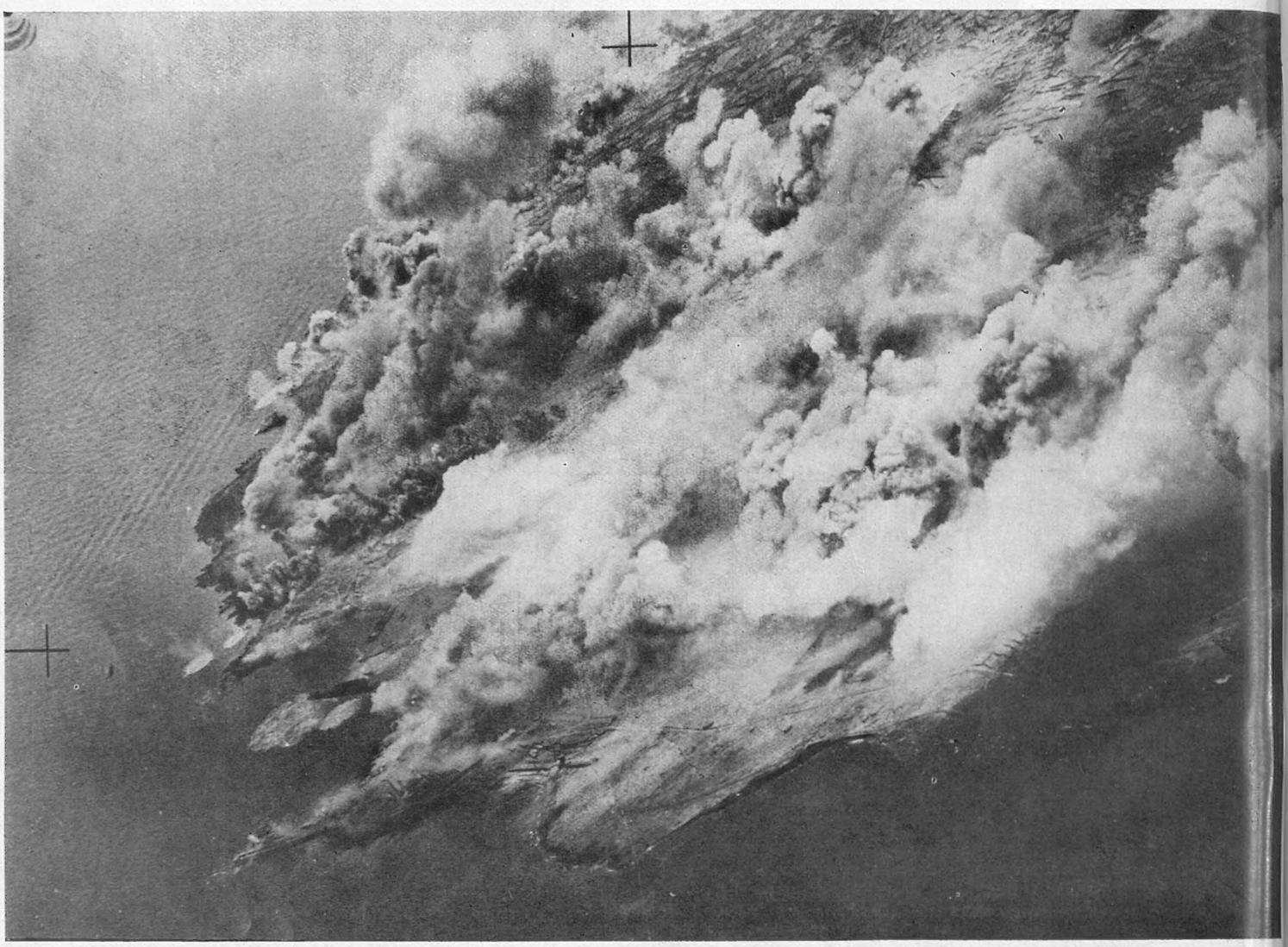
**KING GEORGE WITH WOUNDED BRITISH SOLDIERS:** During the second day of his visit to the troops, the King visited a convalescent home on the Mediterranean coast where a number of British soldiers are now recuperating from wounds received during the recent African battles. He visited their recreation centre in the woods, and then joined them on the beach, where hundreds of men were bathing and enjoying the strong sunshine. He was given a tumultuous reception

**AN INFORMAL LUNCH IN THE WOODS DURING THE KING'S DAY WITH THE AMERICAN ARMY.** On the extreme left is General Mark Clark; next to him is Sir James Grigg, War Secretary; Lieut.-General George S. Patton is on the extreme right. Lunch was served to the King in the open in a mess can as used by soldiers of the U.S. Army, and the meal was made up of American Army rations

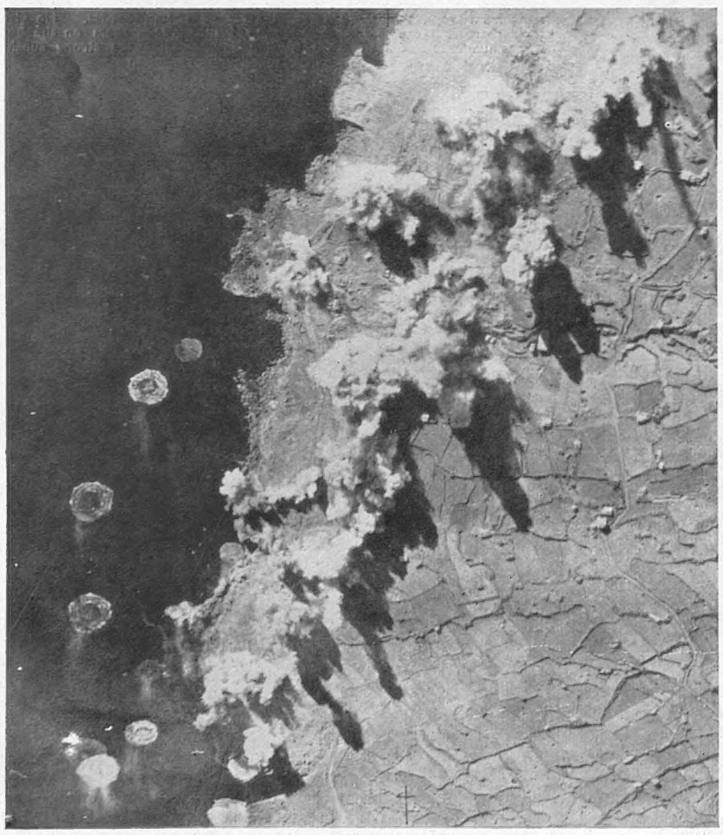
# FIRST PICTURES FROM THE ISLAND OF PANTELLARIA

## The First Enemy Position Ever to Surrender as the Result of Air Power Alone

*These vivid pictures show the terrific pounding to which the island in the Sicilian Narrows was subjected by the Allied Air Forces, the landing of the first British aircraft on the battered aerodrome and the scenes of devastation which greeted our troops as they landed to take over Italy's outpost in the Mediterranean*



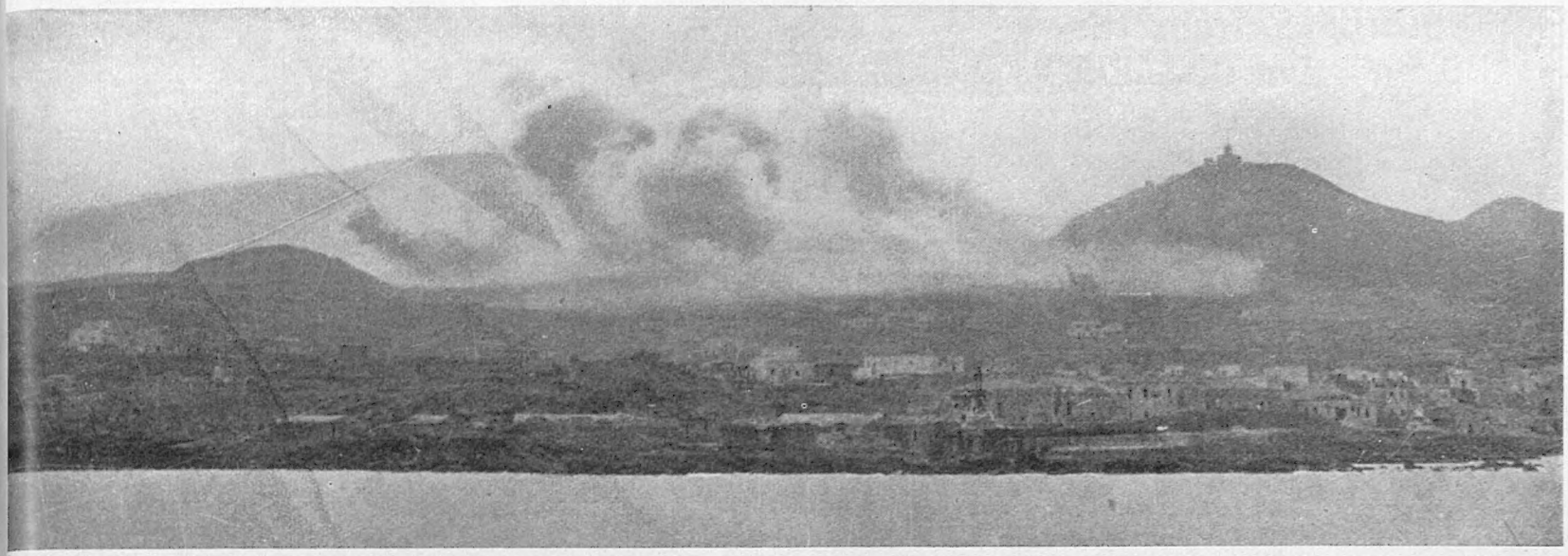
**WHAT THE BOMBING OF PANTELLARIA MEANT: THE WHOLE NORTH-WESTERN TIP OF THE ISLAND WREATHED IN SMOKE from bursting bombs as the hundreds of Allied aircraft kept up their merciless attack. In the eleven days of June alone 3,500 tons of bombs crashed on the island: every available type of British and American bomber operating from North Africa participated in the unprecedented assault**



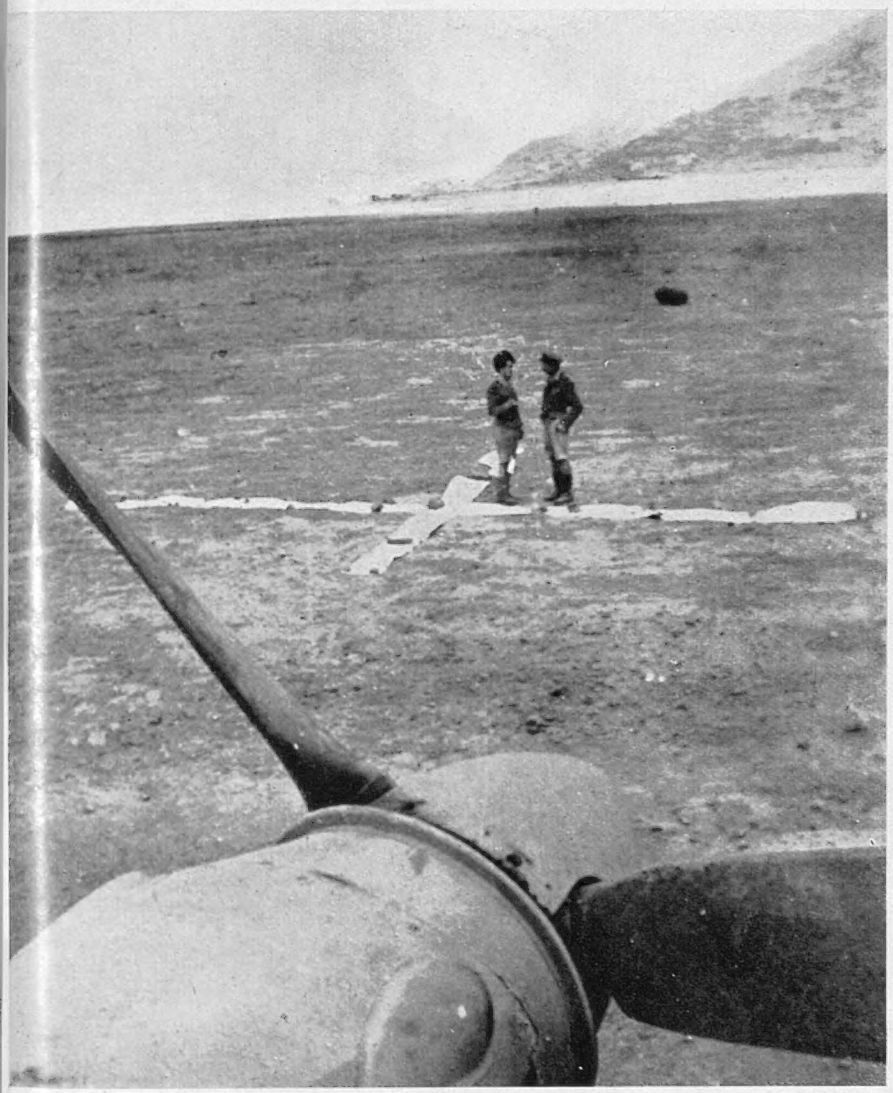
**BOMBS BURSTING ALONG A PANTELLARIA WATERFRONT just before the island's surrender. Not a single moving object around the island was allowed to escape**

Never before in history has an enemy position been subjected to attack such as that which preceded the fall of Pantellaria. After our troops had landed on the island, eyewitnesses were amazed by the terrific damage inflicted by Allied bombs. "You can't walk on Pantellaria without coming upon deep bomb-craters," said one of the landing-party. "The damage done by air bombardment is the worst I have ever seen, through the blitz at home and through the Tunisian campaign." Forts had received direct hits, which smashed the cement walls, and there were holes right through the top of stout pill-boxes. Many of the heavy coastal guns had been demolished. The airfield was covered with bomb-craters

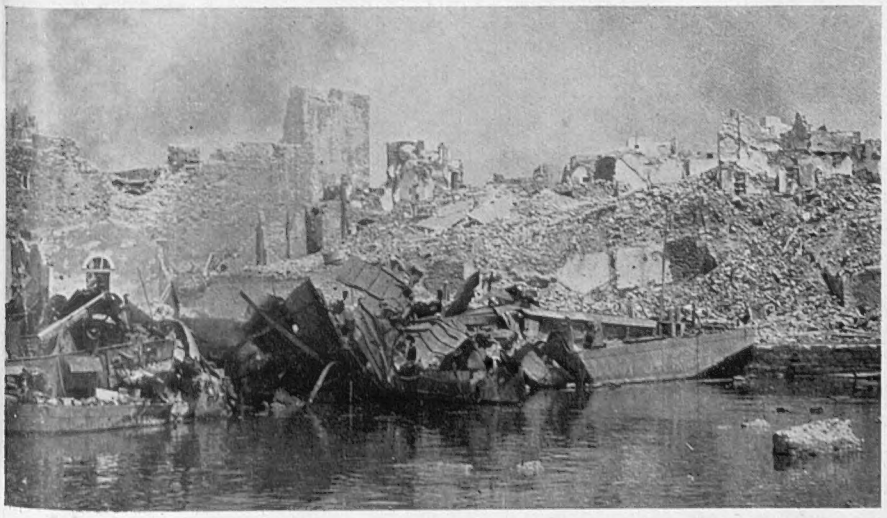
**AN R.A.F. BOSTON ATTACKING ONE OF THE AXIS POSITIONS ON THE ISLAND—only one item in an unremitting attack during which little enemy opposition was encountered**



BOMBS BURSTING ON THE ISLAND AS OUR LANDING CRAFT APPROACH. On the day following the third anniversary of Italy's entry into the war, the Allies made a landing on the island. Prior to this the Allied Air Forces had subjected the island to a terrific bombardment, which was also supported by the guns of the Royal Navy. When our forces landed on Pantellaria, the island had already been surrendered as a result of the air onslaught



HOW PANTELLARIA SIGNIFIED ITS SURRENDER. The white cross displayed on the airfield, where the first British aircraft (a Hurricane piloted by Sergeant H. E. Love) had just landed amidst the shell-craters and bomb-bursts



A SECTION OF THE WATERFRONT OF PANTELLARIA, showing a burning enemy invasion barge. In the background is the indescribable chaos amongst what was once a harbour

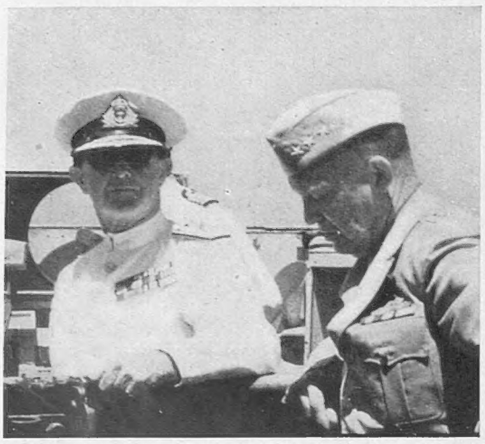
SERGEANT H. E. LOVE, OF THE R.A.F.—the first pilot to land on the island of Pantellaria after its surrender. He was able to accomplish this feat despite the unserviceable state of the airfield, with its surface everywhere pock-marked with bomb-craters

THE ITALIAN COMMANDER-IN-CHIEF, Admiral Pavesi (on left) with one of his senior staff officers. Both are now prisoners in our hands. Under the command of the Admiral were several thousands of men—not a single one of whom was able to escape from the island, and most of whom have now been transferred to internment camps in North Africa. Two calls to surrender were made by the Allies before Admiral Pavesi telephoned to Mussolini that continued resistance was no longer possible: then came the surrender sign on the aerodrome as shown on the frontispiece of this issue

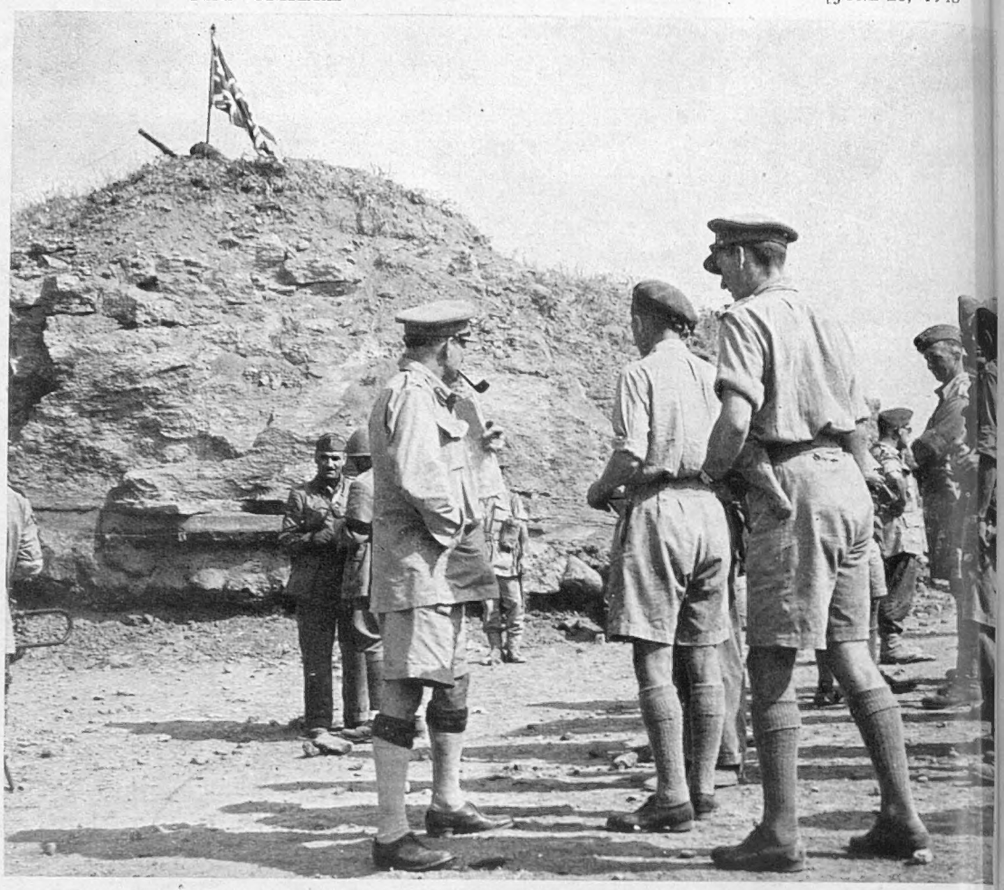
# FIRST PICTURES from the ISLAND of PANTELLARIA

*(cont.)*

*Scenes after the Landing of the Allies; And Views of the Great Damage Wrought by the Air Bombardment*



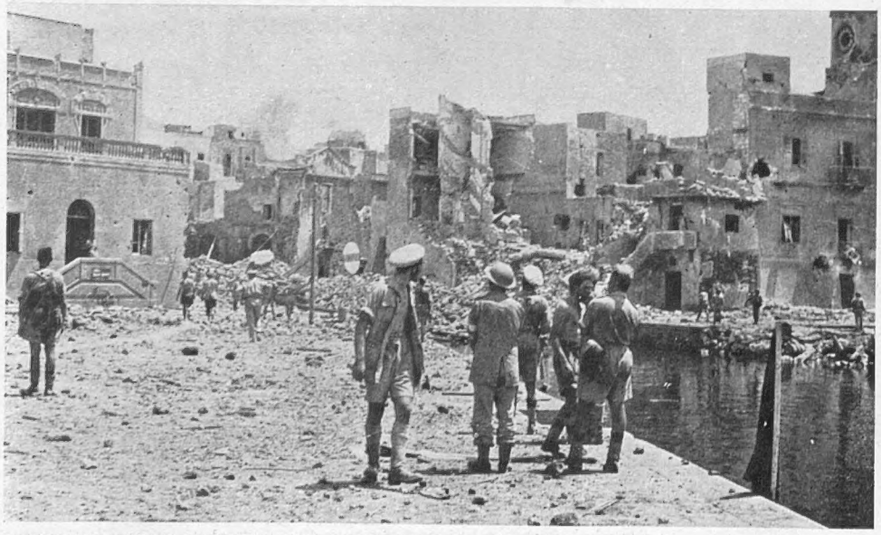
**ADMIRAL CUNNINGHAM AND GENERAL EISENHOWER watch the bombardment of Pantellaria from the bridge of the British cruiser "Aurora."** Four British cruisers and six destroyers from Malta added the weight of their shells to the continuous bombardment of the island on the morning of June 8. Shore batteries were silenced, and the destroyer "Nubian" went inshore firing, as she closed, to cover motor-boats which dashed into the harbour to displace machine-gun posts. This engagement was witnessed by the two Allied Commanders-in-Chief



**AFTER THE SURRENDER OF PANTELLARIA, a British General in charge of the landing operations (smoking pipe) held a conference on the aerodrome with Admiral Pavesi, the Italian C.-in-C. On the high ground at the rear, the Union Jack is already flying**

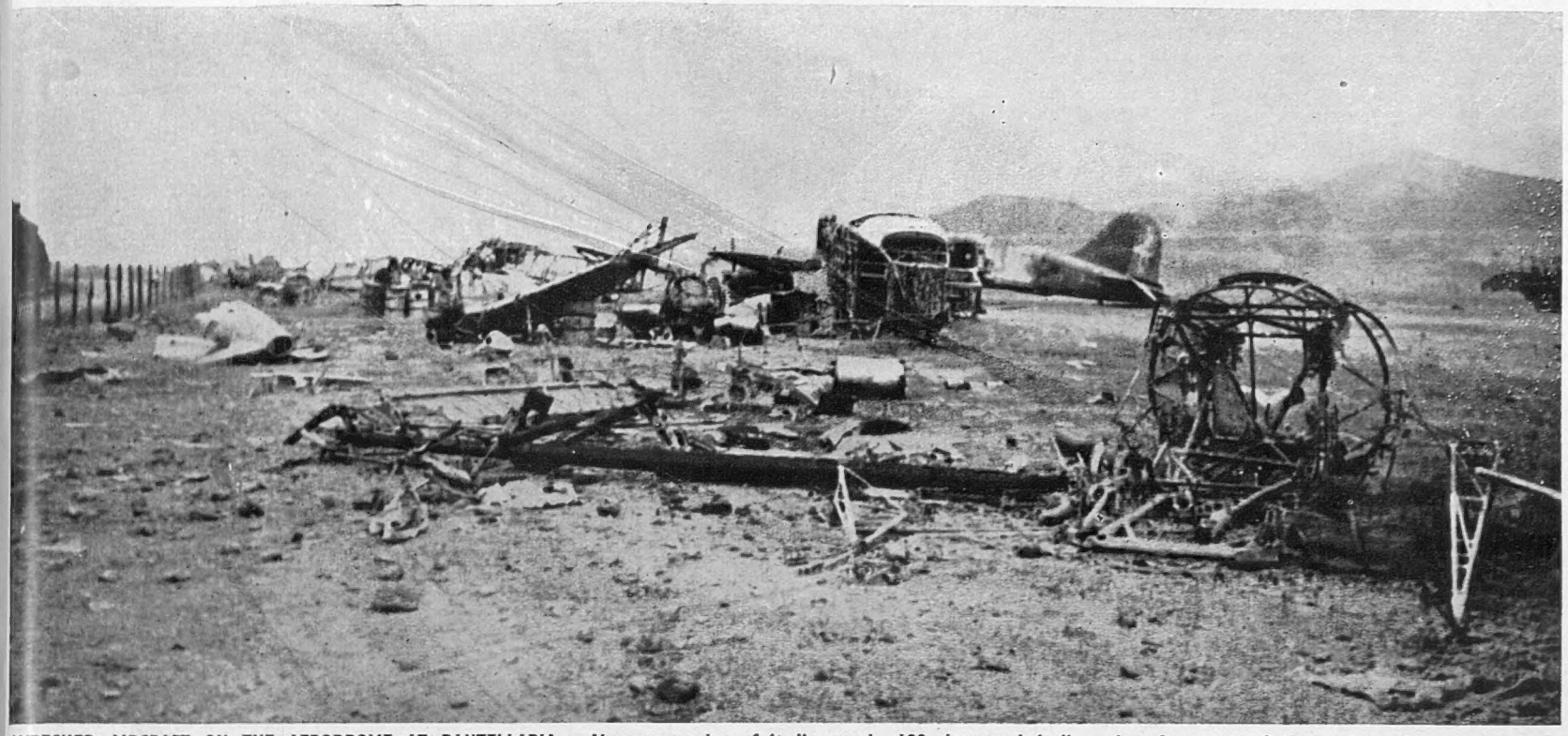
**THE FIRST BRITISH TROOPS GO ASHORE. They did not land until after the white flag had been hoisted on Pantellaria's aerodrome; and then an attempted attack was made on them by fifty or sixty German dive-bombers. This was beaten off and within 42 minutes of the surrender the island was in Allied hands**

**PRISONERS OF ONLY ONE HOUR washing themselves at the docks. Most of them had sheltered in the island's subterranean hangars and caves during the bombardments and were only too glad to be rounded up by our troops**



**A DOCKSIDE SCENE SHOWING THE DEVASTATION CAUSED BY ALLIED BOMBS in the Harbour of Pantellaria. Hardly a building—and not a ship—remained whole**

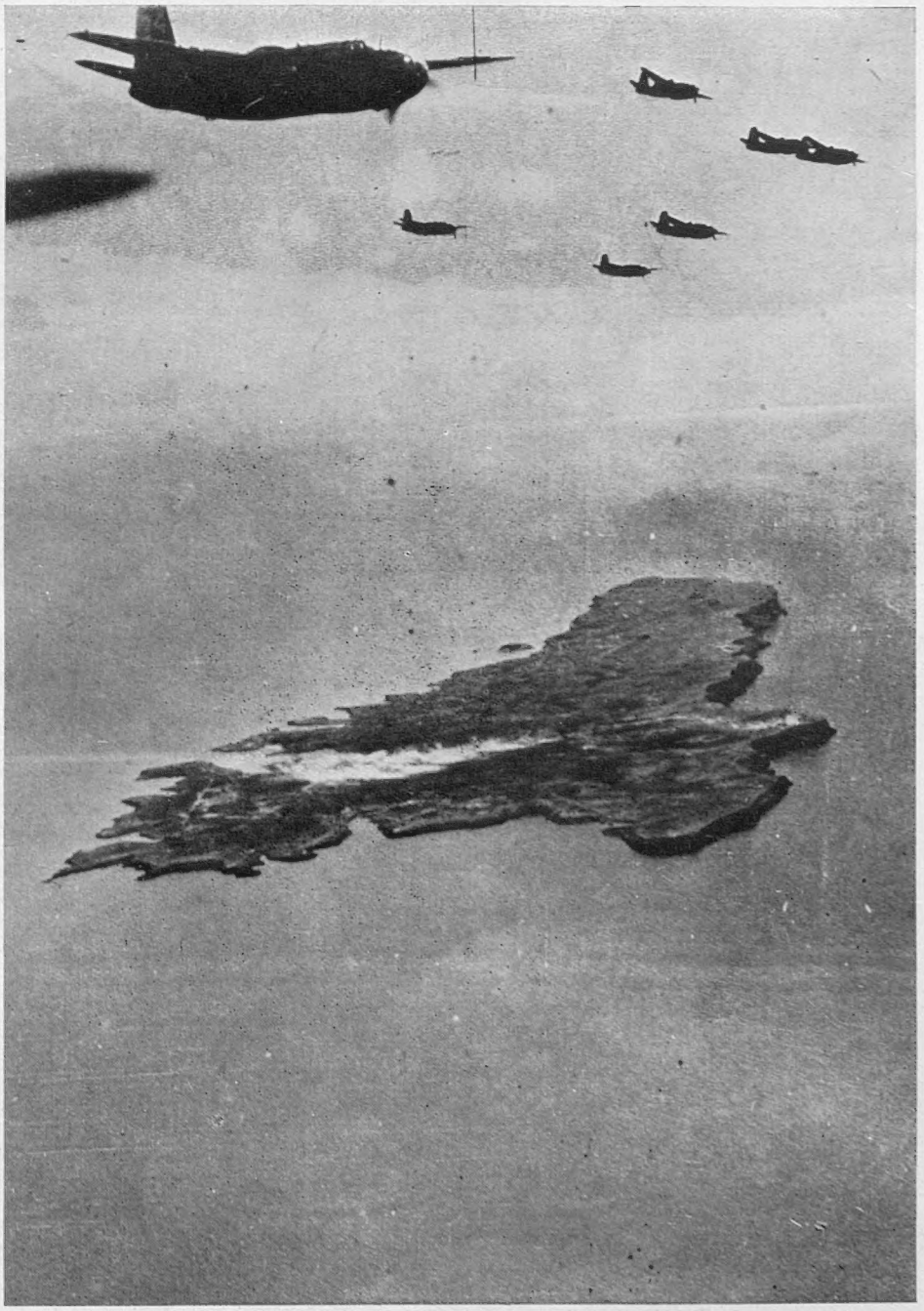
**TROOPS PATROLLING THE DEVASTATED STREETS in search of stray enemy elements in hiding in the bomb-wrecked town**



WRECKED AIRCRAFT ON THE AERODROME AT PANTELLARIA : Along one edge of it lie nearly 100 destroyed Italian aircraft, many of them obviously caught where they lie. The airfield was one of Mussolini's great prides : it contained vast underground hangars, with endless store rooms and galleries branching from them. Whilst in Italian occupation, the Pantellaria airfield was used time and time again by aircraft attacking our ships and merchant convoys

TROOPS ENJOYING A CUP OF TEA and a brief respite among the ruins of the town. The work of reorganising Pantellaria was put in hand as soon as the British landing parties had arrived : it is continuing without cease despite sporadic bombing attempts by German planes

PRISONERS BEING TAKEN THROUGH THE STREETS TO THE COMPOUNDS. There were some 15,000 Italian troops on the island, but few Germans. Many of them were of poor physique. Note the prevalence of white scarves and towels in the picture above!



—AND THEN CAME THE SURRENDER OF LAMPEDUSA : R.A.F. Boston bombers attacking the second Italian island in the Sicilian Narrows. This island, together with the still smaller islet of Linosa, soon fell into our hands. Both held out but a very short time against Allied naval and air attack after the surrender of Pantellaria. The latter gave in on the 11th ; Lampedusa on the 13th ; Lampione, a fourth but unoccupied islet, also fell into our hands—this clearing all the islands within the vital Sicilian Narrows. The white flag of surrender was seen from the air on Lampedusa Island after our air forces from North Africa had bombarded it for 24 hours : the whole extent of the island is seen in the above aerial view

# AT THE GATEWAY TO THE MEDITERRANEAN

*The Threat to Allied Prestige at Tangier, Whose International Status was High-handedly Suppressed by Spain* By FERDINAND TUOHY

MORE than once, of late, the newspapers have told how the Allies have already "conquered a whole continent." This sounds splendid, but conveniently ignores the tiny north-north-western tip of Africa, Spanish Morocco, very importantly situated and about the size of Kent, Sussex and Hampshire strung together.

Spanish Morocco not only is not in the Allied camp; it is in the hands of an interested well-wisher of the Axis. It is more. The whole intention having been to insinuate the Zone into grandiose Axis conquest and dominion, in default of these there is anger with the Allies up and down the colony, which becomes hatred in the case of Falangist officials and settlers, and professional hostility among European and Moorish mercenaries dependent upon Franco.

Here in this last Fascist corner of Africa, Germans, Italians and Japanese and their vassals are still fighting an Axis war in the several ways yet open to them, an aggravation of the ways that Castillo's Argentina allowed others of their kidney down on the South Atlantic. And with this further difference: that Hitler's General Staff is at Perpignan, 600 miles away, and not 4,000.

Whether Spanish Morocco can still be regarded as constituting a peril in the military sense, depends on what view one takes of Germany's continued ability to strike. If Hitler has really missed the Spanish bus, Spanish Morocco cannot, without him, seriously menace the United Nations. Even in an unpredictable war of this nature, one can safely say that. The outstanding risk and danger reside in Hitler's own predicament and need of a counter-blow, and in Franco's internal weakness and appreciation of what Hitler's downfall would mean to him. Taking a gambler's last throw, the Spaniard may serve the plans of Hitler in a passive manner, pleading inability to do otherwise. The very fact that this is possible shows to what extent Spanish Morocco is a thorn in the Allied side and how necessary it is that the United Nations take every opportunity that offers to assert themselves in a Zone which, at best, must continue to be a drag on them.

Nothing could help the Allies more, in this respect, than the re-establishment of their prestige at Tangier, which remains the focus of the whole territory: how Tetuan figures, hardly matters beside Tangier. Europeans, Moors and cross-breeds will take their cue from the wind that blows at Tangier, and tack accordingly. Should there be a rise in Allied authority, the effect will permeate even to the Riff, and corresponding recognition of the superiority of the United Nations will operate as a safety-bringing douche on present Fascist dominance and hostility in Spanish Morocco.

Nobody in his senses disputes Spain's primacy at Tangier. Half the population is Spanish and the place is indissolubly blended with Spanish life and history. But there is a world of difference between arranging the future with a friendly Spain and being chivvied about, locally, by a thoroughly unfriendly one, and by a particular Spain, moreover, unable to withstand Germany, which was exactly the reason why Spain was not given Tangier in the first decade of this century.

Tangier looks like playing a part in the wider planning for peace, situate, as it is, at one of these world cross-roads which may be utilised in some form of international supervision executed in all our interests. Some facts from the past are, therefore, permissible. The present chapter really opened in 1905 when the Kaiser did a Cecil B. de Mille act on a white horse, up Tangier's steep and smelly hill. At the resultant Algeciras Conference, and right down to the war in 1914, Alfonso's Spain requested Tangier and failed to get it because of Anglo-French fears that she would be unable to keep out the Germans, who had designs on Morocco generally.

The threads were taken up anew in 1923, and this time something concrete supervened: France, Britain and Spain set up an international government. The United States and Italy refused to participate, though Mussolini joined the administration five years later. It was probably before his advent that Spain came nearest to obtaining Tangier by agreement. Primo de Rivera, who, for a dictator, had points, invited a solution in these words: "If Spain cannot be sovereign at Tangier, as at Ceuta or Melilla, we wish at least that Tangier be placed under our protectorate as the rest of the zone." Primo was out for a show-down in a big way, in the Straits. He also proposed unofficially that the British should cross to Ceuta and the Spanish re-enter Gibraltar.

Nothing came of it all, and things jogged along for a dozen and more years, and how they jogged. Frankly, Tangier's international control was a mess, a wasteful, overlapping, cumbersome, toe-treading muddle. Perhaps the thing was impossible, in view of some of those temperaments! The experiment was certainly rendered more difficult by Casablanca's vertical rise, which hit Tangier grievously and turned its Moors into sullen critics.

By April 1939 there was a hot atmosphere of hostility in the place. Consequent on Fascist-Nazi walking on the Democracies, the natives took a poor view of British, French, Americans, and the others with treaty rights: Portuguese, Norwegians and Dutch. These countries had substantial interests in Tangier. As an instance, Britain had more than £3,000,000 invested in property and mortgages, while there were five British insurance companies and two banks, five English hotels, and a British Chamber of Commerce with twenty member firms. At one time there were as many as 3,000 British residents. But the victorious Falangists and Requetes and the no-less-cock-a-hoop Fascists and Nazis strode provocatively as owners up that steep and smelly hill. Franco filled Tangier with his adherents during the phoney war, and in June 1940, Colonel Yuste marched into the international city at the head of troops, and collared the governorship in November by abolishing the Committee of Control and the Assembly and the British, French and Italian superior officers. Protests from London and Washington. Haggling in Madrid. Franco promises to respect foreign economic interests in Tangier. British recognition of Spain's special rights in that city. And then what? The biggest smack in the eye of all for the Democracies. Ejection of the Sultan's representative from the Mendoubia, once the German Consulate, and its return to the Germans—Consul Rieth controls Axis activities from the Palace to this day.

All pretence was now dropped. Tangier was by high-handed action made part of the Spanish Protectorate and in ensuing months and years there was nothing to do but grin and bear it while British and Allied nationals were treated as very lesser breeds and given clearly to understand that they were on their way out. Franco knew that in our weakened condition we couldn't risk the slightest trouble at the western gateway to the Mediterranean, and the grab went steadily forward under totalitarian and sometimes Gestapo conditions. At the same time, armament of all kinds was built up in this demilitarised, neutral, international city. Armour, shore and A.-A. batteries and air strength, in particular.

At the time of the North African landings, Britain and America voluntarily undertook to respect the whole Spanish position, but under reserve, and this was made the excuse for further military assembly which is said to have attained five divisions in the country round Gibraltar and eight divisions in Spanish Morocco, including Tangier. Even six months after the landings, the Allies evidently deemed the position still too delicate to show a stiff front, for Franco seized the French Post Office, really communications headquarters, in April, and followed this by interfering with our air-mail and the *Tangier Gazette*. Yes, even after the consolidating Tunisian triumph, General Uriate, the Governor, arrested and deported Arabs and Jews who had signed to work for the Allies in French Morocco.

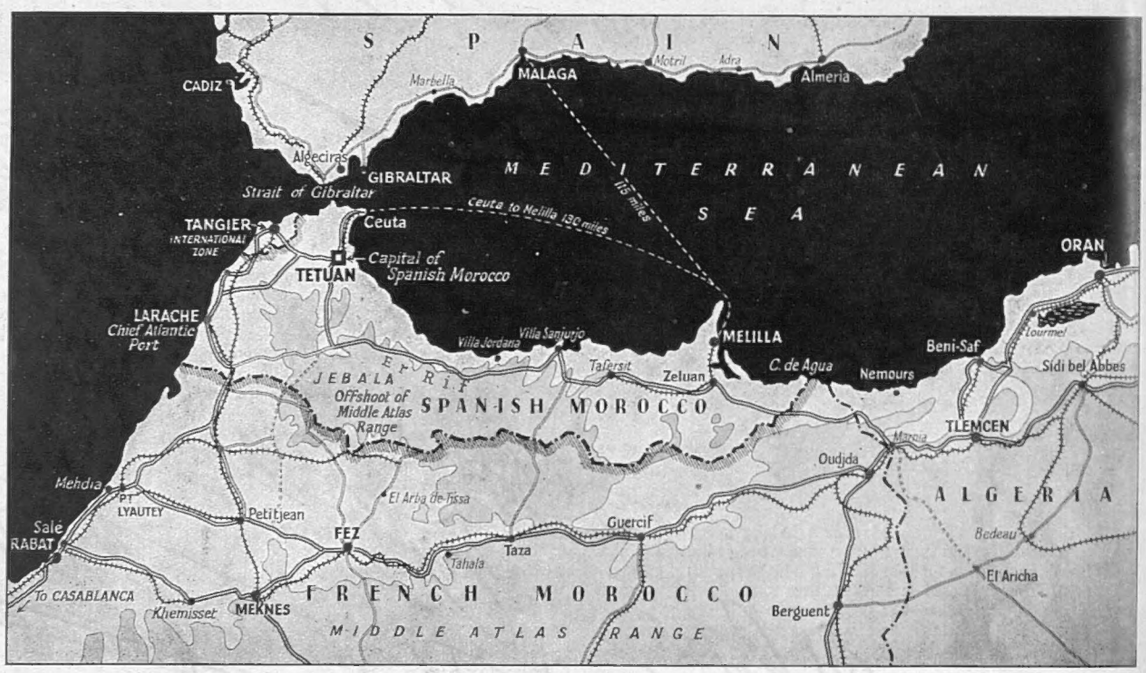
No wonder Tangier citizens of the United Nations, still many thousand strong, decided they had stood enough and that, with victory in the air, it was time they united, as if, in hint, to their Governments at home. They jointly refused to attend the opening of the Cultura Española Exhibition, and now they are asking: "What about re-establishing the international regime in the Tangier Zone?" Aside from personal insult and organised hostility at their expense, Allied currencies have been singled out for local depreciation at a time when the cost of living has soared incredibly.

One thing we need to remember: the Americans are in an exceptional situation vis-à-vis Tangier. They have never recognised the International Statute any more than they have the Spanish-Fascist seizure; and they are within 50 miles, a whole army, and then some. Their General Clark has twice visited Spain's High Commissioner Orgaz, and report says that discussion has included the Spanish claim to expand in fertile territory as far south as Fez, though one fails to see how this can possibly be taken up in the absence of France.

However that may be, the Americans, who are on the spot and taking in their surroundings, are going to have a great deal to say with respect to what goes on in the future round the Pillars of Hercules, world cross-roads and jumping-off point for the Americas in the Air Age. Falangist propaganda even asserts that they intend taking French Morocco!

Continued discretion and reserve over Tangier, even if this appears as excessive humouring of a rickety dictatorship, may commend itself to those on the inside, who are obviously called upon to view a position falling in two separate spheres: military risk now and the general settlement due to-morrow.

But that should not stop the United Nations informing Franco that there must be no more nonsense at Tangier. So much can be diplomatically conveyed to him. It would have two positive effects. It would be standing by Allied citizens who live in the temporarily man-handled Settlement. And it would raise United Nations stock, i.e., fortify the Allied position on the southern side of the Strait of Gibraltar.




**TANGIER, THE INTERNATIONAL ZONE AND SPANISH MOROCCO. The Zone was seized by Spain in June 1940 and its international nature was abolished by Franco: Spanish Morocco is the home of a number of German and Italian and Japanese nationals, who are free to move at will although surrounded on all sides by British, American and French Armies**

*The fact that goods made of raw materials in short supply owing to war conditions are advertised in this publication should not be taken as an indication that they are necessarily available for export*

# The SMASHING of an AXIS AIR CONVOY

*A Remarkable Battle Picture Taken Over the Sicilian Narrows During the Tunisian Campaign*

**HOW THE ENEMY SUPPLY CONVOYS WERE SHOT DOWN INTO THE SEA OVER THE MEDITERRANEAN: An actual combat picture taken as a body of thirty-five big Junkers Ju.52s were attacked by American bombers and fighters from North Africa at water-level**

During the North African campaign, the Axis made repeated attempts to reinforce their armies in Tunisia by means of large air convoys. Very few of them got through without loss; on many occasions the battle developed almost into a massacre! The above remarkable battle picture was taken over the Sicilian Narrows: thirty-five Axis air transports were attempting to cross over to the Tunisian tip when they were intercepted by U.S. Mitchell bombers and P.38 Lightnings on patrol from North African bases. In the result, no fewer than twenty-five of the big and slow and very vulnerable enemy aircraft were shot down. In the picture above, twelve of the Ju's are seen under attack. At the very left the tail of one of the U.S. planes may be seen: this aircraft was flying very low; it had just completed its attack and was starting to climb again. At the extreme right another attacker (the wing-tip only of which is seen) is also pulling away. Machine-gun fire is actually riddling the Axis plane seen just above the water on the left, and is throwing up a string of splashes. Bullets are also striking the water around the Ju.52 seen under the wing-tip on the right

**THE AMERICAN AIRMEN'S "GIBSON GIRL": A small balloon which sends out a continuous SOS signal**

**HOW THE BALLOON IS INFLATED BY AIRMEN IN A DINGHY: Filled with hydrogen, the "Gibson Girl" can hoist up an aerial high enough to cover 100,000 square miles of ocean with its distress signal.** These two pictures show one of the latest life-saving ideas from America. By means of an aerial held aloft by a hydrogen-filled balloon, signals from a newly-developed, portable radio transmitter can be flashed over 100,000 square miles of ocean after American airmen have been forced down at sea. The transmitter is known to aircraft crews as the "Gibson Girl" because of its hour-glass shape: it weighs only 33 lb. and was developed by the Bendix Aviation Corporation in collaboration with the U.S. Signals Corps' aircraft radio laboratory at Wright Field. Already tuned to the International Distress frequency, by turning a hand-crank even an inexperienced operator can flash a continuous SOS signal to act as a radio guide to searching aircraft

b

**THE BATTERY WHICH FOUGHT TO THE LAST GUN AND WHICH SAVED THE ALLIED** at Sidi Nisr, when the last British 25-pounder was still engaging.

# THE LAST GUN . . .

## The Great Stand of the 155th Field Battery, R.A., at Sidi Nisr, February 26, 1943

*—An Epic Story of the Heroism of British Gunners During the Tunisian Campaign*

On February 26, at Sidi Nisr, in Northern Tunisia, the 155th Field Battery, R.A., fought one of the finest battles in the long, glorious history of the Royal Regiment. At a cost of virtually complete extinction, the battery did the work entrusted to it. Sidi Nisr lies in the hills 12 miles east of Hunts' Gap, near Beja. It was held by the 155th Battery and the Hampshires, another battalion of the regiment which distinguished itself at Tebourba. Their orders were to gain time. Time was vital if Beja, the key to the northern Allied line, which was threatened by a strong German force, was to be put into a state of effective defence.

On the evening of February 25 no signs were visible of enemy movement. The Divisional Commander, his Commander Royal Artillery and the Commanding Officer of the Field Regiment to which the 155th Battery belonged spent two hours examining the countryside from a dominating observation post and could detect nothing ominous. But during the night Very light signals began to go up in the hills around Sidi Nisr, and at 6.30 next morning heavy mortar fire opened.

After forty-five minutes' shelling came a direct assault. German tanks drove down the road from Mateur. Four 25-pounders leapt into action, No. 1, specially placed at the top of a slope to cover the Mateur approach, firing over open sights. Three tanks were hit as they attempted to pass through a minefield and the road was blocked.

Checked in their initial thrust, the enemy sent in lorried infantry, who turned the battery's southern flank under cover of a hill. Things began to look serious.

By midday thirty German tanks, with self-propelled guns and infantry in support, had worked round both flanks and were within 600 yards. The battery might have saved itself many losses had it concentrated throughout the fire of all its eight guns at a range of 1,200 to 2,000 yards on the German

**LINE IN NORTHERN TUNISIA—AT A LOSS OF EVERY ONE OF ITS OFFICERS AND 95 PER CENT. OF ITS MEN. The final moment, at nightfall on February 12, German tanks which were lumbering through the position, at ranges of from ten to twenty yards—***Drawing by Edward Osmond*

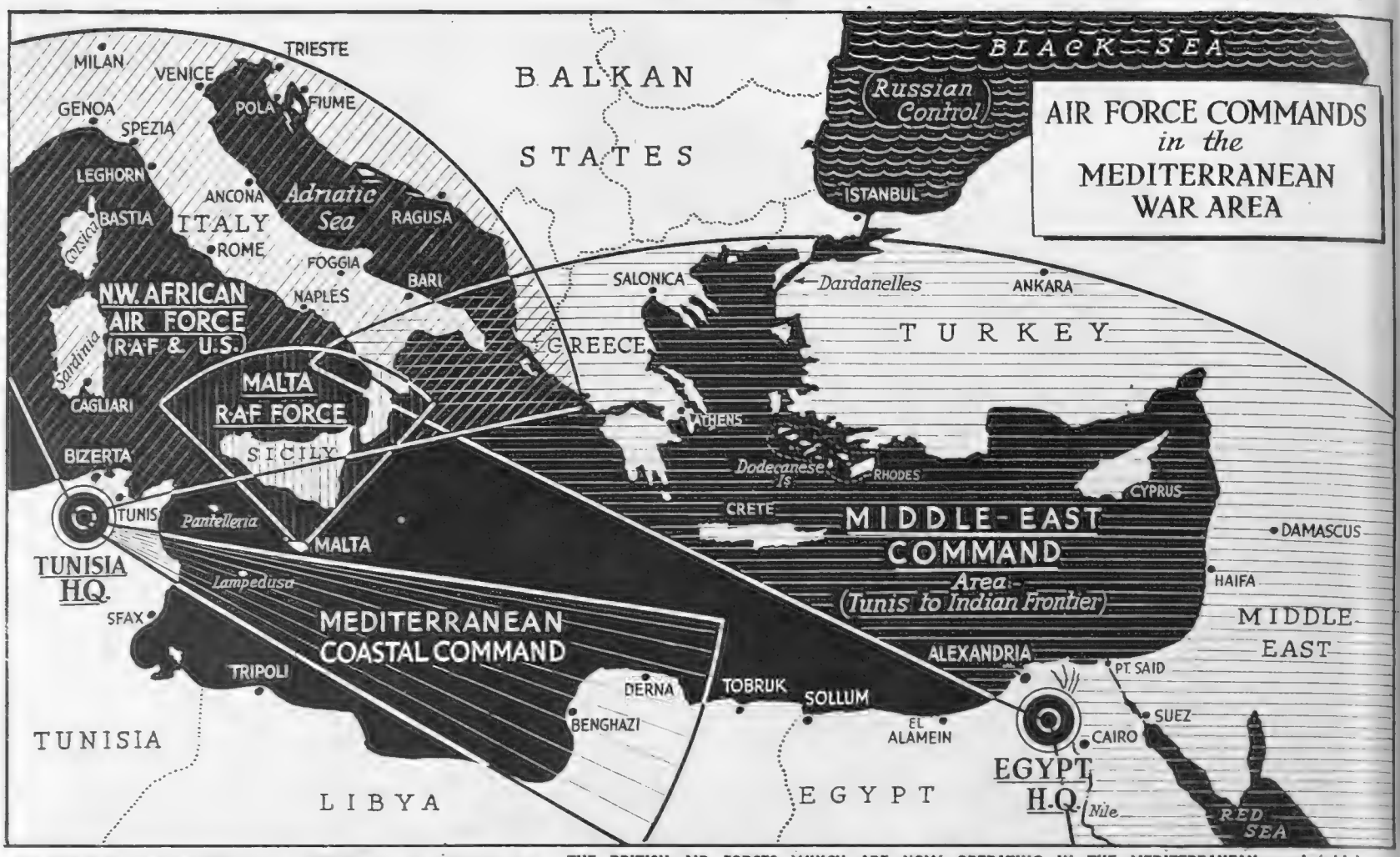
tanks and artillery, whose columns were cluttering the way up from Mateur. But its first duty was to protect the Hampshire companies by all means in its power.

About 3.30 on every ground of military probability, the battle was almost over. So, at least, the German Command reasoned. What was meant to be the death-blow was struck by a column of tanks which raced along the road into the heart of the battery position. Thirteen other tanks gave covering fire with guns and machine-guns from hull-down positions. A Mark VI led the attack. This was holed three times in the turret by shells from No. 1 gun of "F" Troop. A Mark IV tried to pass round the wreckage, but it also was knocked out by No. 1 gun. The same gun set on fire another tank. The surviving tanks drew back and shelled and machine-gunned both "F" and "E" troops, whose positions were easily spotted, for they were now engaging the enemy over open sights. Hull-down, the enemy tanks had a great advantage. Concentrating on one gun at a time, the enemy killed the detachments, smashed the guns and set the remaining ammunition on fire.

When all seemed finished, the Germans advanced again. But a surprise awaited them. At its dying gasp, the 155th Field Battery could still hit back. No. 1 gun of "F" Troop, whose crew had showed themselves heroes among heroes, destroyed the leading tank. A moment later a direct hit killed all the survivors. Without a man left, No. 1 was silenced. Nos. 2, 3 and 4 fought on. One officer, batman, cooks, all who could stand, ran from gun to gun, serving each in turn. Although the issue was decided, they fought out the day to the last man at ranges which shrank from 50 yards to 10 yards.

At 5.30 the Germans, heavily mauled, moved on to crush "E" Troop as they had crushed "F." At nightfall one 25-pounder and several Bren guns were still engaging, at ranges of from 10 to 20 yards, German tanks which were lumbering through the position, smothering the last resistance, swivelling round on their tracks and crushing in slit trenches.

A few minutes earlier the last message had come over the wireless, "Tanks are on us," followed by the single "V" tapped out in Morse. At the guns, in the command posts and observation posts when the battle began, there were nine officers and 121 other ranks. Nine survived, of whom two were wounded.




**THE BRITISH AIR FORCES WHICH ARE NOW OPERATING IN THE MEDITERRANEAN, and which are referred to in the official communiques from this theatre of war—a diagram which shows their various spheres of influence (*see* notes below)**

## A CHANGED SITUATION throughout the MEDITERRANEAN

**After the Freeing of the Sicilian Narrows through the Capture of the Italian Islands**

*—Special Sphere Maps*

### Our Mediterranean Air Strength

From the North Sea to the Suez Canal, the Allied Air Forces must now be able to muster probably almost a 2-to-1 numerical superiority in medium plus heavy bombers over the Axis forces in the same area, and certainly much more than that in terms of bomb-carrying power. Not only have our bombers grown in numbers, but in range. The radius of action of home-based and African-based bombers now overlaps in Europe, forming a sector which can be pounded by our Lancasters and Stirlings at night, and by North African high-flyers in the daytime.

What has happened to Spezia could equally be done to Milan, Trieste, Genoa and Leghorn, and scores of other places. Since the beginning of the end in North Africa, this has been provided by the creation of three new commands, jointly forming the Mediterranean Command under Air Chief-Marshal Sir A. Tedder. Of the three components of this command, the one most in the limelight at the moment is the North-West African Air Force. Major-General Carl Spaatz, of the U.S. Army Air Force, is in command, with Air Vice-Marshal J. M. Robb as his deputy. It is this force which has kept up the blitz on Sicily, Sardinia, Southern Italy and Pantellaria, and its equipment includes the whole panoply of bombers, fighter-bombers and fighters.

The Mediterranean Coastal Command is under Air Vice-Marshal Sir H. P. Lloyd. It is composed of both British and American fighter, reconnaissance and light-bomber squadrons. On the defensive, it looks after our ports, supply centres and bases. On the offensive, it attacks enemy shipping and submarines. It was this force which played havoc with Arnim's and Rommel's tankers and supply ships.

How large the Mediterranean is we tend to forget. Consequently, the R.A.F. Malta force, under Air Vice-Marshal Sir Keith Park, enjoys a considerable degree of autonomy. As we rolled back the Axis forces in Tripolitania and Tunisia, it naturally became a highly valuable attack base for the North African campaign.

In terms of amount of territory covered, undoubtedly the biggest of the three sub-sectors of the Mediterranean Command is the Middle East Command, under Air Chief-Marshal Sir Sholto Douglas. Its ground includes everything east of Tunisia to Madagascar, and up to the Indian frontier.

**THE SIGNIFICANCE OF THE ITALIAN ISLANDS as air stepping-stones in the coming assaults on Italy. The arcs indicate the areas covered by fighters over a radius of 100 miles from their island bases. Sea routes and railway lines are also indicated**

**HOW THE AIR ATTACK ON PANTELLARIA BEGAN.** This picture was taken about three weeks before the island surrendered, just when things were beginning to "warm up" for the Italians. It shows the tip of the island under attack by U.S. **Mitchells** which had flown out from North Africa. As the bombers turn away, their bombs are seen to be bursting on the target below, and the air is filled with flak from the defenders' anti-aircraft guns

THE THREAT TO THE ITALIAN MAINLAND: Italy recalls her legions from the Balkans for the defence of Rome, thus affording an interesting historical parallel with the fifth century (see notes in box at upper right)

**The Threat to Rome** (see *map at left*)

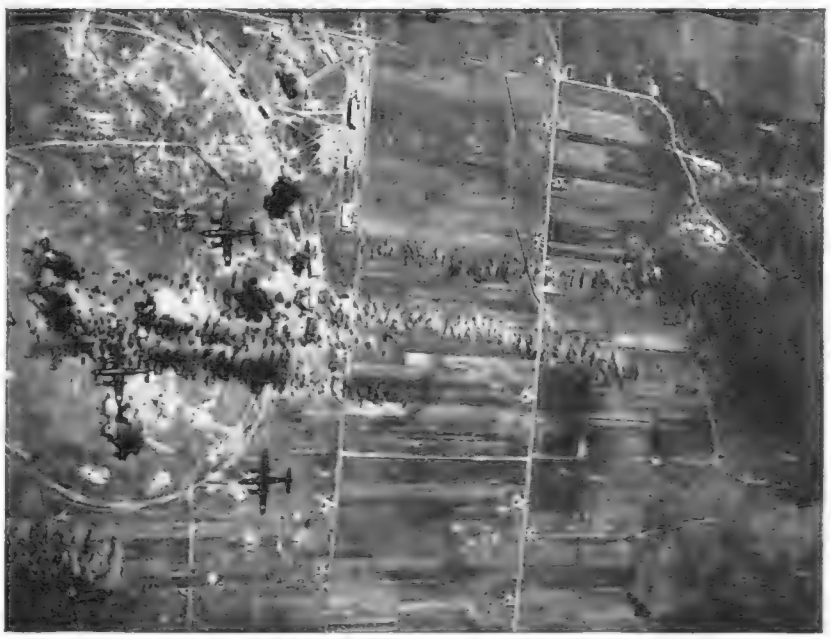
In the year A.D. 410, when the hordes of barbarians were invading Italy and threatening the city of Rome itself, there began a thinning out of the garrisons holding the remoter frontiers of the Roman Empire. These withdrawals were felt by the local Roman commander defending Hadrian's Roman Wall. Once again a threat to the historic city on the Tiber brings about the return of Italian legionaries to the defence of their native soil.

It must be with bitter feelings that the Italian High Command surrenders anything of a hold on Albania or Dalmatia. For years past the naval and military experts have propounded the absolute strategical necessity for Italy to hold these two countries. Unfortunately, although Italy had some historic claims to the coastline of Dalmatia, she had none for the hinterland, and only the pleasant security which a powerful naval base at Valona would give to her naval dispositions.

The Yugoslavians could not suffer without some kind of fighting protest against the Nazi demands made in March 1941. When this heroic gesture failed, as it was bound to fail owing to the lack of time for preparing a defence, the country was overrun by the German hosts. The subjugated land required to be garrisoned. This task proved a much more difficult one than the Italian military command had hoped for.

For a couple of years Italian forces have been wasting their strength against these obstinate and adroit fighters, who have been divided into separate combative bodies, one known as the Chekniks, fighting under General Mihailovitch, the Yugoslav military leader, and the more loosely distributed groups known under the general title of Partisans who have been maintaining their independence further to the north.

Not only in Yugoslavia had Italy's strength become entangled. She was allotted the task of keeping down the rebellious spirit of Greece, the last indignity (as the Greeks regarded it) to an heroic people, who had defeated their gaolers in the open field. With the increasing threat to the military security of Italy itself the Italian forces in Greece began the retreat towards Rome. Legions from the much-coveted Albania have also crossed the Adriatic to its western shore, leaving comparatively small garrisons behind.



THE TECHNIQUE OF AERODROME DESTRUCTION. A picture taken during an attack by American bombers on the Alghero aerodrome in Sicily. Approximately twenty-five bombers took part in this raid: three of them (Martin Marauders) are seen above, flying across the airfield in formation, with their bombs falling on runways, buildings and dispersed aircraft

**The Defence of the Balkans** (see *map below*)

Among the many problems which are now facing the German High Command is the defence of South-Eastern Europe—the Balkan countries and the Black Sea. They have to consider not merely the strength of the fortress walls, but the disaffection within the walls. Greece and Serbia, so apparently easily conquered by the overmastering power of the German armies, have not proved easy to reduce to collaboration and acquiescence under German overlordship. Under the skilful leadership of General Mihailovitch, the Serbian Guerrilla force has kept large numbers of Nazi soldiers in the country, trying to prevent the persistent attacks upon the railway, the seizing of isolated outposts, and constant sabotage. Half-starved Greeks also keep up the struggle, with bands of partisans in many parts of the country. Even in Bulgaria, though the Government signed the Axis Pact, things have not gone just as Hitler would like. Another anxiety for Germany is the continued existence of the Black Sea Fleet.

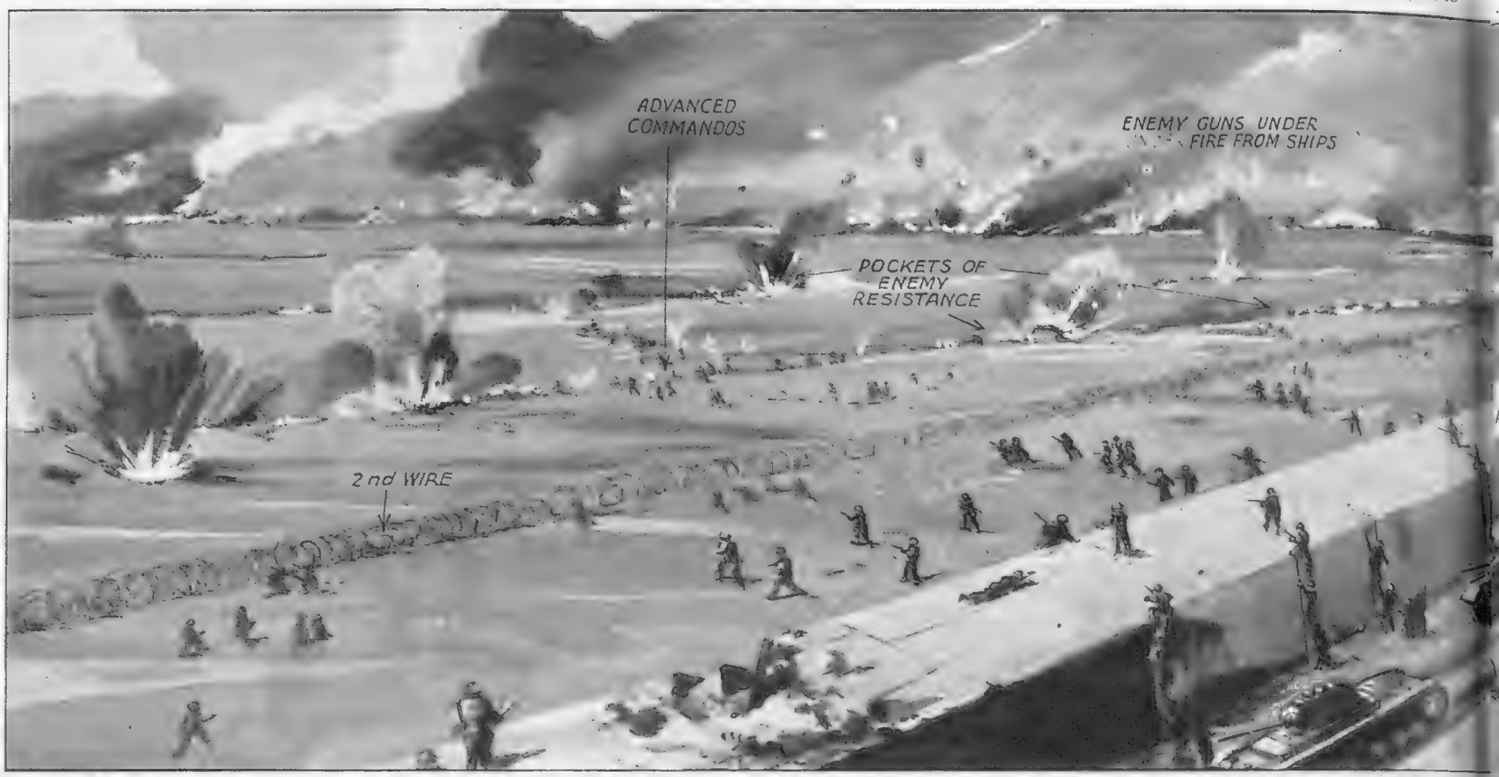
How is Germany preparing against a possible Allied invasion in the Balkan area?

The whole coastal area of Greece, either under the Italian Command, is now taken over for defence purposes by Germany, who has gathered fifteen divisions into Greece, Thrace and Macedonia. Many of the Italian divisions have been recalled to Italy and only a limited number remain to assist the Nazis. Every part of the intricate coastline where the Allies could possibly attempt a landing is claimed to be so fortified with heavy coastal batteries and concrete defences as to render such an attempt impossible without enormous loss. There are also numerous U-boat lairs where submarines lie ready to pounce upon the massed naval and transport vessels required for the anticipated invasion, while all parts of the coast are said to be dominated from their air bases. Large numbers of German airmen have arrived in Greece, and General Loehr has been busy reorganising the whole air defence.

The Greek railways have been improved to allow of quick movement of troops; in fact, everything has been prepared to repel any invasion project, except the Greek people. Crete is claimed by the Germans to have been so strengthened that it can emulate Malta, but in reality the Nazis have not complete control over the interior of the island, for Cretan patriots, together with the British soldiers left behind at the evacuation, have maintained resistance in the mountainous region, evading all attempts at capture.

In Bulgaria the Germans have taken over most of the control of the country, but there is a growing belief that they have again backed the wrong horse and that the Allies are now certain of victory

THE CHANGED SCENE IN THE EASTERN MEDITERRANEAN. The sphere of Allied influence now extends from Russia, through Syria and Persia, right round to the Atlantic coast by way of North Africa, all of which is now securely in our hands (see notes at left)



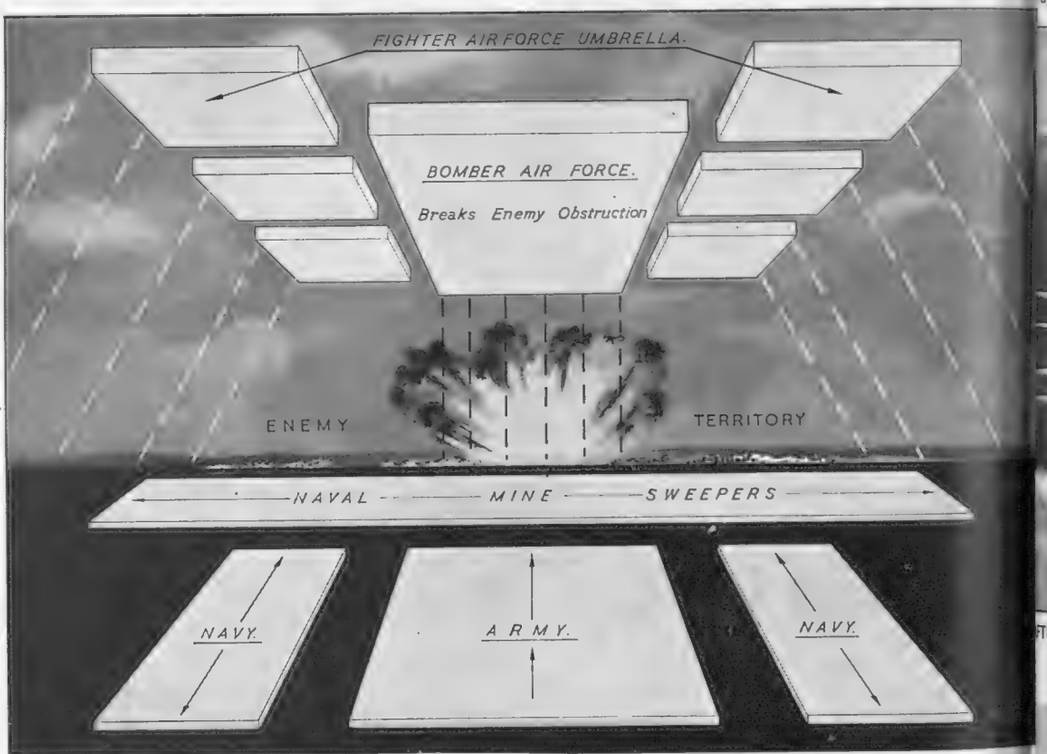

**THE TASK WHICH LIES BEFORE THE INVADERS AFTER THE FIRST LANDINGS HAVE BEEN MADE ON THE ENEMY'S BEACH.** The troops have disembarked fro... means of scaling ladders, leaving the breaches (previously opened up by "block-buster" bombs) to be enlarged by the following infantry and the wire barrie... the tank landing craft and supply lorries are following them up. As the infantry go forward, pockets of enemy resistance are mopped up. As soon as ...

# "AMPHIBIOUS OPERATIONS"

## —and How They will be Carried Out

*"It is evident that amphibious operations of a peculiar complexity and hazard on a large scale are approaching"*—*Mr. Winston Churchill in the House of Commons, June 8, 1943*

A Special Section dealing with the "Peculiar Complexity" of an Invasion Armada, and a Survey of the Problems involved




**THE PERFECT COMBINATION BETWEEN THE THREE ARMS DURING A LANDING—AIR, NAVY AND ARMY IN CO-OPERATION.** The bomber air force breaks down the enemy's beach obstructions and "softens up" the whole invasion area: whilst performing these tasks the bombers are constantly protected by a fighter force "umbrella." Meanwhile the naval minesweepers get to work clearing channels for the Naval forces and for the seaborne Army to be landed on the beach under cover of the naval guns—*Drawing by B. C. Wood*

WHEN Mr. Churchill spoke of "amphibious operations of peculiar complexity" with reference to events with which we are already or soon shall be familiar, he was basing his words on hard knowledge and experience. But many of us are still inclined either to underrate the difficulties of invasion landings, or to magnify them out of proportion to the facts. Possibly a few technical details of the actual problems involved may assist understanding. First, the invasion fleet itself.

It is headed by—great 15-in.-gun battleships? No: the glorious spearhead consists of the humblest and yet the most gallant vessels of the Navy—those sturdy little minesweepers without whose hazardous labours no other ship could hope to approach the threatened coast unscathed. Then it all depends on the depth of the inshore water whether the next vessels shall be large or small warships. Probably, however, the great protecting battleships and aircraft-carriers will stand off at a distance while the huge fleet of transports nose cautiously shorewards in the dawn-reaching dark. They will be ready at a given signal to bombard the shore batteries, to meet enemy warships, to launch fighter protection and bombers.

The transports, of course, are transformed liners and freighters, probably transformed at a moment's notice only a few days previously (for shipping is so precious that it must be employed on its ordinary commercial work up till the last hour). The ghostly grey vessels are crowded with men in full kit, stopwatches tensely aglow, and with guns, tanks, vehicles, supplies all arranged for swift disembarkation. At which the entire armada comes to a halt, there is only the creaking of cordage and muffled throb of engines, perhaps a single voice or injudicious laugh, and, like a school of purposeful porpoises, the landing craft are swiftly edged alongside under their own power. The great ships spill their human and mechanical cargo overboard like grain elevators. Boots alone speak and they in muffled tones. There are dim light signals, and the first parties set off.

Upon their success, and particularly their success in surprise, depends the smooth running of the whole operation. But we are concerned with the armada as such, and must take it for granted that the Commandos and assault troops of various kinds do succeed, that they are backed efficiently by airborne invaders and diversionary landings elsewhere, and that soon the signal comes from among the distant gun-booms and flashes of the slowly-lightening shore that the main body may proceed landwards.

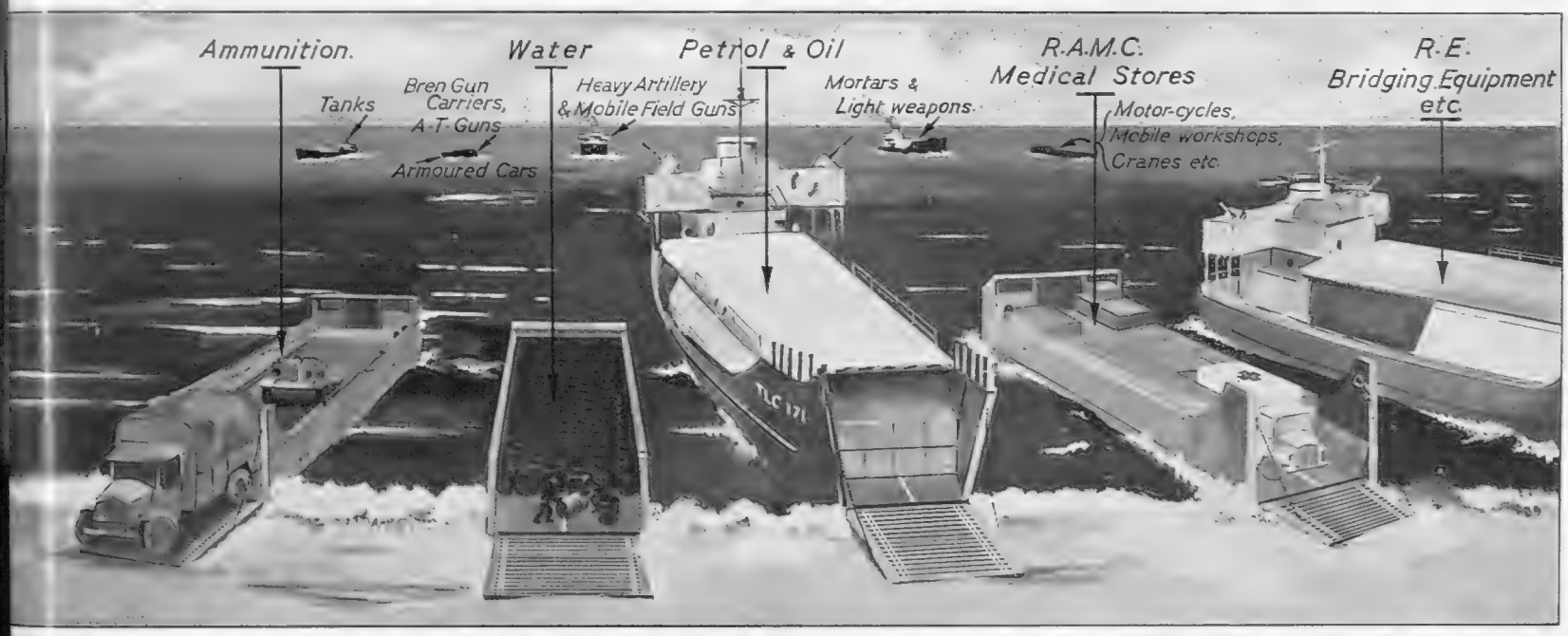
But still the most complicated part of the invasion fleet, its supply organisation, must remain quietly at a distance till another signal is received and it is known that a complete bridgehead has been established—which is to say, the defending garrison of the chosen enemy port has been defeated, swift counter-attacks of enemy armoured divisions have been beaten off, landing-grounds have been occupied and made operational, and strong entrenchments established round the periphery of the chosen area. Complete air mastery of the neighbour skies must have been obtained. Perhaps the supply part of the invasion fleet will have retired during this time, or dispersed to come forward later.

Those first men on the shore, for all their success, are helpless to prevail long without substantial reinforcements and supplies. In fact, an invasion can never be both successful and static. It must be going forward all the time, for ever enlarging itself. And to achieve that, unless the country be very friendly, like North Africa, the entire gamut of a great military camp—a complete Salisbury Plain—must be landed as soon as possible in the occupied territory. Ships, therefore, to carry building materials and labourers, to carry cranes, girders and machinery, to carry bakeries, kitchens, workshops, offices must be ready immediately the signal is given to enter the captured port or to send their cargoes ashore in more specially-constructed barges. Even more elaborate and difficult transhipments must follow, an endless stream of tanks and guns and vehicles for the full-blown armoured divisions now landing.

Meanwhile, tankers are bringing in countless gallons of ordinary petrol, of aviation spirit, of lubricating oil, of kerosene, at first in tins, later for transfer by pipe to storage tanks erected like overnight mushrooms from sectional parts by swarming engineers. Coal is landed, cement, water-pipes and perhaps water, careful cases of medical supplies and

(continued on page 400)

ir special landing craft under the guns of the naval force covering the operation: the first waves of Commando shock troops have crossed the sea wall by be pierced by Bangalore torpedoes, wire-cutters and other devices, whilst sappers clear the mines laid on the shore. Meanwhile, tanks have been landed from idgehead has been established, further troops and supplies will be convoyed in by the Navy, whose guns will again support the further landings.—*Drawing by E. G. Lambert.*




FTER THE LANDING IT IS ESSENTIAL TO BRING UP A WHOLE HOST OF SUPPLIES, and the success of the entire operation depends on the speed with which this task is carried out. In the background, the principal supplies necessary for the landing parties are indicated—ammunition, water, petrol and oil, medical stores, bridging equipment, etc.: behind these, reinforcements of various weapons—guns, tanks, mortars, etc.—are indicated for landing on the beach soon after

RT OF OUR INVASION NAVY: The naval light craft which cover the landing operations during invasion. The crews of these vessels are also assault troops and are specially trained to fight with the landing parties, if necessary. They are shallow-draught motor-boats, with a power-operated gun-turret and a mortar. They look like miniature destroyers: their job is to go close inshore, lay smoke-screens and engage the enemy defences to cover the landing of the infantry

## "AMPHIBIOUS OPERATIONS"

(continued from preceding page)

whole hospitals, and here, with great circumspection, ammunition ship after ship transfers its lethal cargo delicately amid the most irksome kind of precautions against holocaust. Tugs have been hurried over from base, local craft and labour are requisitioned, a police force established, sanitary squads maybe wrestling already with recalcitrant sewers. And here, to give the romance a more factual tinge, are some relevant figures.

Supposing we are landing a preliminary force of 100,000 men, or five mechanised divisions with corps and Army troops (roughly half of them being combatants and the other half administrative and pioneering personnel). There would perhaps be four regiments of tanks, each of two battalions, one reconnaissance group a battalion strong, two artillery groups, field and anti-aircraft, two battalions strong, one motorised field engineer group the equivalent of a battalion—all this to *each* division. Roughly, the five divisions thus composed would require some 1,800 tanks, 9,600 vehicles, 1,250 motorcycles, and a corresponding number of guns, caissons, limbers, workshops, and so on. *At least 2,750,000 gallons of petrol would be required to keep such a force going for a minimum preliminary campaigning period of seven days.*

Now for the shipping. Approximately 100 ships of some 2,000 tons apiece would be needed to carry those men and their impedimenta—we used 2,000,000 tons in the original North Africa landings—and if small landing-craft carrying either six tanks or twelve vehicles with their men are conjointly employed (the small types having been proved the most satisfactory for general purposes), a fleet of at least 1,300 to 1,500 of such vessels would be involved. Multiply these very conservative, tentative figures by the size of the forces that will ultimately be required for the full invasion of Europe and you will have some idea of what Mr. Churchill meant by "peculiar complexity."

Since last November we have needed 11,000,000 tons of shipping to supply North Africa. The minimum for the preliminary landing of one modern division is 70,000 tons. The maintenance of a single American division in Australia requires 200,000 tons a month. It has been said that for the minor operation of Madagascar we employed nearly 150 merchantmen and several dozen warships.

As for the air side, probably about 400 transport planes would be needed to carry 10,000 men over and probably another 200 for their appurtenances. Easily 1,000 fighters would have to be operational over the landing area and preliminary casualties would run into hundreds (the experience of Dieppe being the standard).

Of course, all these figures would vary according to the locale of the operation. Transports could probably steam right into Norwegian fiords after preliminary naval and air battles. On parts of the Italian mainland and island coastlines we would not need such heavy fighter protection. But the toughest spots have to be tackled sooner or later, and it is best to visualise another Dieppe scene for the purposes of general description.

Here it becomes supremely evident that the most important requisite for the preliminary success of a landing operation is surprise. Then the special service troops must be ready to deal quickly and efficiently with walls, pill-boxes, barbed wire, tank traps and batteries. They must be assisted by co-ordinated bombing raids on those obstructions, and must have a wide variety of the latest types of mortars, grenades, Bangalore torpedoes, wire-cutting apparatus. Then there must not be a moment's hesitation between the preliminary success and the follow-through of the main force. It is well known that the defensive policy of Von Runstedt, the German Commander-in-Chief in Western Europe, is the instantaneous switching of mobile armoured forces to meet attack anywhere.

"Peculiar complexity"? Yes. And we should deceive ourselves neither by foolish optimism nor craven pessimism.

**AN INVASION "ARMADA" APPROACHES THE ENEMY COA**
**troops and tanks, whilst that on the right is a smaller t**
**the troops i**

**AN IMPRESSION OF A STAGE IN THE LANDING OPERATIONS DURING AN AMPHIBIOUS ATTACK ON AN ENEMY POSITION.** THE TROOP TRANSPORT amount of material which must be transported to the shore is enormous and varied. In addition to the vast number of troops, tanks and other vehicles r defence works on landing. Water is required, and probably a number of vessels carry no other cargo. Extensive medical and surgical arrangements are nec the casualties. Yet other craft may be devoted entirely to the signals organisations, for communications must be maintained at all costs. Add to this the fighter aircraft, and the immensity of such an operation may perhaps be realise

COA In the foreground are the special invasion craft perfected in America for use with the U.S. Army : the one to the left is apparently large enough to carry both er ted for transporting lighter vehicles. Between these are tank-carrying craft of the type used at Dieppe, and beyond are countless landing-barges packed with ops ill make the actual landing. Above all, is a huge umbrella provided by the Allied Air Forces—*Drawing by Wm. McDowell*

PORT THE LEFT ARE DISCHARGING THE SOLDIERS INTO LONG PERSONNEL LIGHTERS. The les r be carried with their necessary ammunition and fuel, spare parts, and tools for nec , with probably special ships to carry the staff and equipment, and to evacuate the ips required for escort and covering to landings and the immense "umbrella" of alise *rawing by Montague Dawson*

"SUPPORT LANDING CRAFT," with crews made up from the Royal Navy and Royal Marines, moving into position during recent training exercises on the South Coast

A PERSONNEL LANDING CRAFT AT SPEED. These vessels are manned by specially trained crews who have to pass through four different training establishments before being allotted to their particular craft

# "AMPHIBIOUS OPERATIONS"

*How the Army is being trained for its next important role, as recently demonstrated by Combined Operations Command*

U.S. RANGERS, UNDER TRAINING WITH BRITISH COMMANDO TROOPS, approach a hostile shore where "enemy" charges are being exploded. During exercises under combat conditions live ammunition and mortar bombs are used to create realistic effects

AN ASSAULT LANDING CRAFT WITH ROYAL MARINES ABOARD AWAIT THE MOMENT when the vessel will run aground on the enemy beach. Many thousands of men have already been trained to man the huge fleet of landing craft built up as standardised productions in British and American yards since Dunkirk

THE ACTUAL LANDING ON THE ENEMY BEACH: A picture taken a few days ago when Press representatives were allowed for the first time to witness the technique of Combined Operations. All the landing craft are vessels of the Royal Navy and are operated mainly by the R.N.V.R. As soon as the soldiers are landed the personnel landing craft have to make a quick getaway "to escape being blown to pieces"

THE INVADERS UNDER ENEMY FIRE AS THEY ATTACK THE DEFENDERS ON THE BEACH. This picture was taken during the training of U.S. Rangers in Britain, where the Americans have come under the command of Vice-Admiral Lord Louis Mountbatten. During exercises such as these, the Invasion Shock Troops learn how to overcome serious obstacles under the most realistic conditions

HOW THE ROYAL MARINES LAND ON THE BEACH. The landing barge is run right up on to the shingly shore: in the distance support landing craft lend protection to the operation whilst cruising off-shore

HOW THE TANKS ARE LANDED FROM SPECIAL CRAFT. A Valentine tank hauls itself up on the beach under cover of its own smoke-screen and with its big gun ready for instant action

# THE ROLE OF THE PARATROOPS

And what they achieved during the Tunisian campaign. *Described by Dougal Gordon and Illustrated by E. Byatt*

The "cherry berets" of our airborne divisions fought their first sustained campaign in North Africa. Like all campaigns it had its surprises and taught its lessons—even to the fundamental one that a parachutist landing on a high plateau in the desert hits the ground much harder than he does in England. Our paratroops won the unstinted appreciation of our own infantry by whom they subsequently fought when things were stiffest. They shared alike in the hard March fighting at Sejenane and Tamera, and in the victorious advances when the tide finally turned in early April. The few Germans who may have escaped from Cape Bon will have a healthy respect for the "red devils," and their war cry of "Bou Mahomet," whenever and wherever they next meet.

After carrying out a number of parachute attacks on Axis airfields and other objectives in Tunisia, our men were employed mainly as crack infantry, which they undoubtedly are. The Nazis, for example, who came up against them at Mansour reported that they were Grenadier Guards—if they had been, they could not have fought better. The paratroops never let slip a chance of raiding, however, even when they were "earthbound." The first battalion, in the early days of December, were reinforcing the French around Mateur. Night after night, they made forays—sometimes as much as 40 miles deep—into enemy-held territory. They made a speciality of ambushing enemy lorries and light armour, and before long had thus managed to provide themselves with very adequate transport. Later this spring, when we

BRITISH PARATROOPS MAKE A LANDING NEAR AN AERODROME IN NORTH AFRICA. During the earlier part of the Tunisian campaign these specially trained men were very active, carrying out some daring raids behind the enemy lines. In this drawing, the artist shows how the men's kit and certain of their arms are landed in separate containers: British practice has since been varied in this connection

PARATROOPS DROPPING TO EARTH IN CHARACTERISTIC ATTITUDE, each man landing with his own pack. British paratroops now carry a certain amount of material in a pack on their backs, thus differing from U.S. paratroops who rely largely on special containers dropped separately and which have to be opened after landing. Every man's parachute opens within a few seconds of his departure from the aircraft, thus permitting of jumps at a very low altitude

were suffering some reverses near Sejenane and Jebel Abiod, the parachutists were again used as a stiffening. On March 8, they counter-attacked at Tamera. For 14 days they fought and counter-attacked in mud and rain that rivalled Flanders at its worst. Towards the end of this phase, one battalion fought for 8 days without rest or a cooked meal. When withdrawn for a night's sleep, they were too exhausted to walk 50 yards from their lorries to where a roof and a dry bed awaited them. It was at this period that, opposed by a Nazi paratroop regiment which was likewise in use as infantry, our men gained their nickname of "red-devils," from their maroon headgear.

At the end of March, the fortunes of the campaign had definitely turned in our favour. Though they made no large drop after their attack on the Oudna airfield on November 28, they were even more busily occupied as infantry. They took part in the smash through the base of the Cape Bon peninsula, thus effectively wrecking Arnim's hopes of orderly evacuation. They were also in the fore-front during the whole of that glorious single day which saw the capture of Ferryville, Bizerta, Tunis and Pont du Fahs. For a force whose origin dates only from the days soon after Dunkirk, and whose first operational sortie was as recent as the Bruneval raid of February 28, 1942, they have done marvellous work. Now they are in a position of vantage near the "underbelly" of Europe. With them as comrades-in-arms are the Fighting French paratroopers, who wrecked the Gafsa-Sfax railway in March, and who made many raids on airfields in Rommel's rear—Barka, Martuba, Daba, and Fuka—before our great offensive opened last November. These, plus the American Rangers, make a combination whose presence in the Mediterranean will be a source of well-founded anxiety to the Axis.

# BY AIR AND BY SEA

## The War Against the U-Boat and Against the Italian Harbours and Naval Bases

*—Specially Illustrated by Sphere Artists*

***Below***—Spezia is the great naval base of Northern Italy: it has a grim circle of forts round it, constructed in 1888, on the high hills above. It has one of the largest and safest natural harbours in the whole of the Mediterranean, and it has been the chief naval harbour in Italy since 1861. Recently it was attacked by our own home-based Lancasters; and then it was subjected to a fierce assault by 100 American Flying Fortresses at the beginning of June. This attack took place only one hour after four big Italian war vessels had arrived in the port: these ships are declared to be the battleships *Roma*, *Imperio* and *Littorio* and the cruiser *Pola*. "Material damage" was caused in the dock area, and also to the *Roma*, which is said to be down by the bow, and to the *Littorio*, which was damaged amidships. The battleships are understood to have arrived at Spezia to escort a convoy from the mainland to Sardinia for the evacuation of part of the civilian population from the island

**HOW THE ITALIAN NAVY WAS ATTACKED IN SPEZIA HARBOUR ONLY ONE HOUR AFTER THEY HAD ARRIVED THERE!** Three Italian battleships are leading, followed by a cruiser: they are understood to have arrived at Spezia for the purpose of escorting a convoy from the mainland to Sardinia, when 100 Flying Fortresses attacked them and the harbour and wrought much damage—*Drawing by E. G. Lambert*

**A NEW-TYPE BOMBER MAKES WAR ON THE U-BOATS: THE AMERICAN-BUILT VEGA VENTURA, which has now been adapted for naval patrol work, attacks a German submarine whilst on escort duty with an Atlantic convoy**—*Drawing by Roland Davies*

The U.S. Navy Department announced a few days ago the first sinking of an enemy submarine in the Atlantic by a new type of Ventura bomber which has been designed for naval patrol work. The Ventura was accompanying an Atlantic convoy and made an attack on a surfaced U-boat from a distance of several miles. The U-boat, after firing her deck guns, attempted to crash dive. The patrol bomber swooped in and released four depth-bombs, whereupon the submarine was blown to the surface and then settled beneath the waves. This sinking took place in April and was the first credited to the new Vega Venturas: these are high-speed, twin-engined, medium bombers. They have been officially reported in service only during recent weeks

**SHIPPING IN NAPLES HARBOUR COMES UNDER ATTACK BY FORTRESSES DURING DAYLIGHT. An impression of the scene as the American aircraft subjected the harbour to one of its heaviest attacks yet. On the height in the distance is the famous Castle of St. Elmo**—*Drawing by W. G. Whitaker*

When this attack was made by Flying Fortresses from North Africa, it was one of a simultaneous series carried out within the Naples area. In the harbour, a merchant ship, 320 ft. long, was sunk and hits were scored on a 510-ft.-long tanker and another 185-ft.-long ship; a dry-dock under construction was also hit. It was during this raid that the enemy tried new tactics to combat the bombers: between thirty and fifty Messerschmitt and Macchi fighters went up and attempted to drop bombs on the Fortresses—tactics which have already been tried (without success) against American heavy bombers raiding European targets! The fighters failed in their objectives, although they continued their attack for 20 minutes after the raid on the city was finished. Ten of their number were shot out of the sky. All the Fortresses returned home safely after hitting their targets. Actually, the Naples assault was a four-pronged attack on industrial, air, shipping and railway objectives: it was a forerunner of the non-stop air assault on Italy which is thought to be the prelude to invasion

**ACTION AT THE SOUTHERN TIP OF THE ISLAND OF CORSICA: TWO BRITISH SUBMARINES ATTACK ITALIAN TRANSPORT VESSELS in the Straits of Bonifacio, where one of the oldest, rock-perched towns of the Mediterranean literally overhangs the sea**—*Drawing by W. G. Whitaker*

British submarines have, during the past weeks, been operating successfully in many waters through which Italian surface craft have been attempting to pass. This drawing shows how two Italian supply vessels were intercepted and sunk in the Straits of Bonifacio, which stretch for six miles between the islands of Corsica and Sardinia. The town of Bonifacio itself belongs to the Middle Ages: it is built quite on the edge of curious, honeycombed chalk cliffs. From the balconies of the houses it is a sheer drop of 200 ft. to the water: the 3,000-odd inhabitants of this strange town divide their time between the Marina on the sea-level and the amazing old Genoese town perched up on the cliffs. From both there is a clear view of the comparatively narrow channel between the two islands. The incident depicted here was only one of a number carried out by daring British submarine commanders close inshore along the Italian seaboard

# A STUDY OF A MOSQUITO

## The All-Wood Wonder Bomber

*Described by A. P. Newall*
*Illustrated by Roland Davies*

## And Pictures of the Newly-Modified HALIFAX

**THIS IS THE BOMBER VERSION OF THE MOSQUITO, showing the open nose behind which the bomb-aimer lies when in action. The fighter version has this portion built up: where the bomb-aimer peers through his glass screen, the four cannon-guns are installed; the latter—in the fighter version—are fired by the pilot**

UNDOUBTEDLY at the top of the tree in the fighter-day bomber class—and likely to stay there for some time—is the D.H. Mosquito. A whole host of features other than the merely technical ones combine to make the Mosquito a machine of unrivalled interest.

In the first place, it was the private venture of a private firm, sandwiched in by its makers almost as a spare-time job in the intervals of the more "official" productions of the firm. It made its first raid early in 1942, well less than two years after the first drawings had been made. The rumours which had been circulating in Canada and Britain about its existence were confirmed on September 25, 1942, by the daylight raid on the Gestapo H.Q. in Oslo.

The basic departure from "modern" practice in the Mosquito is its wooden construction—most of its structure can be made by any good cabinet-maker, and repaired by any good carpenter. Possibly about 25 m.p.h. of the plane's top speed—on which the unarmed bomber version, the Mosquito IV., depends for its safety and the fighter Mk. II. for its pugnacity—is due to the smooth rivet and ripple-free plywood skin. As for damage, anyone who has ever tried to shoot a rabbit with a high-velocity bullet will know why the Mosquito can absorb so much punishment. Bullets and shell splinters are so little retarded by the plywood that, as a rule, they simply punch a clean entry and exit hole. Only if a vital component is in the line of passage is the Mosquito likely to be seriously affected. Otherwise a neatly scarfed patch is likely to be the only evidence of enemy action. The chief visible difference between the bomber Mk. IV. and the fighter Mk. II. is the latter's flat-fronted, bullet-proof windscreen.

A second glance reveals further differences, in the four Browning machine-guns peeping out in place of the bomb-aimer's window, and below and slightly behind them the four cannon. The cannon installation is a particularly neat trick of design. They occupy the forward portion of what would otherwise be the bomb bay, and are accessible for servicing simply by opening the bomb doors. The fighter has a small entrance door in the side, whereas the bomber is entered by a trap-door in the fuselage floor. These detail distinctions cannot be easy to spot in the air, however, and no doubt play their part in encouraging a cautious frame of mind in any F.W.190 pilot who happens to find himself in the neighbourhood of a Mosquito.

Like most really good aeroplanes, the Mosquito does not advertise its performance, even to its crew. The fuselage, being built of balsa wood sandwiched between two plywood skins, is quiet and warm. When diving or climbing, only the altimeter and air-speed indicator give the game away, though one does sometimes get the "left in the lift" sensation—not unnatural when zooming at over 400 m.p.h.! On a combination of all counts—range, speed and hitting power—the Mosquito exceeds all other two-motor planes in existence, either Axis or Allied—the Me.210 is definitely inferior. Most gratifying fact of all, though, is not only that it is the best of its type in existence, but that it is suitable for production in any civilised country, and Canada is already making them, with American Packard Rolls-Royce engines.

Besides the curtain-raising Oslo raid, the Mosquito made the first daylight Berlin raids on January 30, to the discomfort of Goebbels and Goering. They performed a scientifically precise job of work in bombing the Copenhagen factories of Burmeister and Wain, where U-boat Diesel engines are built.

On moonlight nights they go train- and ship-busting across the Channel. As an intruder, its range of about 1,500 miles places most enemy-occupied airfields within its range when operating from home bases. From Malta, the intruder version has already been over Italian territory, and will doubtless be over quite a lot more!

**THE NEW HALIFAX**—The Handley-Page Halifax is one of the outstanding bomber successes of this war. Not only can it carry a heavy bomb-load for long distances, but it can also defend itself during attack by night fighters. The latest versions of this aircraft (which has undergone numerous structural changes) have a considerably enhanced performance over the earlier types. The modifications include a changed nose, giving an improved view for the bomb-aimer; and the installation of a Boulton Paul gun turret, with four ·303 guns, in the dorsal position in place of the earlier two-gun turret. The differences in the appearance of the new-type Halifax are well brought out in the two photographs reproduced here. The powerful rear turret remains unchanged

*On right*—**A HALIFAX LEAVES FOR DUSSELDORF. A picture taken on the night of June 11.** This raid was officially described as of "very great strength." The number of heavy bombers despatched was the greatest yet engaged in any night. When this picture was taken, the big aircraft was just becoming air-borne

**HOW THE MOSQUITOES WORK IN DAYLIGHT RAIDS OVER GERMANY—An attack on the large and important railway workshops at Trier (Treves). The Mosquitoes' bombs smash into the roofs of workshops and send the debris higher than the planes even before they explode**—*Drawing by Roland Davies*

The attack on the power station and the important railway workshops at Trier (better known as Treves), just on the German side of the frontier between Germany and Luxembourg, was made in daylight—as is the habit of Mosquitoes. The bombers attacked from between 50 and 200 ft. with bombs fused to explode after a few seconds' delay. These were seen to smash into the roof of the railway workshops and the impact of the bombs, even before they exploded, threw debris higher than the Mosquitoes! The Trier power station, the next building to the railway workshops, was also hit, and many blue flashes, evidently from short-circuited cables, were seen by the Mosquito crews. As the bombers left the target a sheet of yellow flame rose 100 ft. into the air and mushrooms of smoke billowed up to the same height. The Mosquitoes took the Germans by complete surprise: the crews saw many people in the streets of Trier as they flew over. The railway workshops are in a large building and employ several hundreds of workers in repairing boilers and making general adjustments to locomotives. Hundreds of these pass through the workshops in a year and, with the Germans so short of locomotives as they are to-day, the importance of the target is obvious. The workshops are also in a key position on the German railway system. Lines run direct from the workshops to the marshalling yards at Ehrang, which can handle 4,000 wagons per day and through which most of the iron ore from France and Lorraine passes on its way to the Ruhr. These Ehrang marshalling yards also came under attack, and the damage here, too, was considerable

**MOSQUITOES ATTACK THE ZEISS OPTICAL WORKS AT JENA, a flight of 1,000 miles out and home—half of which was over hostile territory. Over Jena itself flak was intense and a balloon barrage was flying: but the Mosquitoes nevertheless went in at below 200 ft.!**—*Drawing by Roland Davies*

Two formations took part in this raid, which had as its objectives the Zeiss optical works and the Schott glass works. To reach the target the Mosquitoes had to fly more than 1,000 miles out and home, most of the way over enemy territory. Anti-aircraft gunfire was intense, and a balloon barrage was flying over the target. But the Mosquitoes pressed home their attacks from below 200 ft. Both factories were hit. Squadron-Leader Blessing said that Wing-Commander Reynolds led them as straight as a die to the target. "It was a perfect example of navigation," he said. "Flak followed us out of the target area, but we came through without being hit." Whilst flying over Germany the Mosquitoes were so low that they sent cows, horses and sheep bolting in all directions! The Germans sent up a number of fighters to intercept the Mosquitoes. The navigator of one bomber saw ten fighters on the outward flight and six on the journey back. The Mosquitoes left them behind. The Zeiss firm controls many other works of the same kind in Germany, and its designing offices produce plans for these other works, as well as for the Zeiss factory itself. The factory employs several thousand workers. It is in the centre of Jena, and a conspicuous target for low-flying bombers

# HOW AUSTRALIA DEFENDS HER PORTS

By Means of Strong Boom Defences Which Stretch Across Her Harbours

THE BOOM IS COMPLETED IN HARBOUR: then, with barrel floats suspending the net below the surface, it is towed out to its allotted place

CHIPPING A BUOY. This is one of the most monotonous tasks in boom-defence work, but a necessary one. The buoys are of great size

STRIPPED to the waist in tropic heat, men of the Royal Australian Navy work day by day at sea and ashore on the unspectacular but vital task of operating and maintaining the harbour boom defence system. The basic function of boom defence is to throw out a protecting screen of giant nets sufficiently strong to prevent enemy prowlers from seaward. No streamlined queens of the seas are the boom-gate vessels—a pair of ungainly "horns" rearing skywards at 45 degrees from the bows earning the ship's soubriquet "praying mantis." But these cumbersome-looking craft must stay on the station in all weathers, for on them and their "horns" devolves the work of opening and closing the "gates" in the nets to permit the passage of friendly shipping and of carrying out such of the maintenance work as can be performed at sea. And maintenance is the main, never-ending task in boom defence, particularly in tropical waters, where marine growth thrives on the massive steel buoys from which the nets are suspended.

Buoys and nets themselves have to be thoroughly overhauled at regular intervals. Routine scrutiny and "running repairs" are carried out by hoisting each buoy with its pendant section of net with the aid of the ship's "horns." But ashore there are well-equipped workshops where more extensive jobs are undertaken. Here skilled men assemble nets after repairing them, carry on with the monotonous job of chipping away marine growth from buoys and cables, and rig entire equipment.

Tied at intervals to prevent their fouling submerged rocks, the nets attached to buoys are taken to a slipway, from where they are towed astern of a boom vessel to their allotted positions. Then begins the ticklish job of removing ties or "stops" to enable nets to hang down. Straddling a rung of a rope-ladder suspended from the ship's guardrail, a rating sets to work with special cutters. It is no job for a landlubber at the best of times, and difficult enough for a practised hand when a heavy swell is running, with a giant buoy swaying back and forth barely an arm's length away. Skilful navigation, too, is called for on this lonely job. The Commanding Officer and the man at the wheel need keen eyes and steady hands to manœuvre the ship into position for lines to be made fast to buoys for the regular inspection which is essential if the system is to be maintained in a state of efficiency.

Men from every State, Australian Commonwealth men, who before the war followed every type of civilian occupation, are carrying on this monotonous job of boom defence. Theirs is a task which earns little public recognition, but they have the satisfaction of knowing that the men in every ship which passes into their harbour have a cheer and a blessing for "the blokes who work the boom."

A BOOM-WORKING VESSEL ENGAGED ON REPAIRS TO THE NET. The ship is equipped with "horns" forward by which repairs to the boom are effected

A VIEW OF A COMPLETED BOOM at the entrance to an Australian harbour. The vessel is one of a number engaged on work in connection with the defences

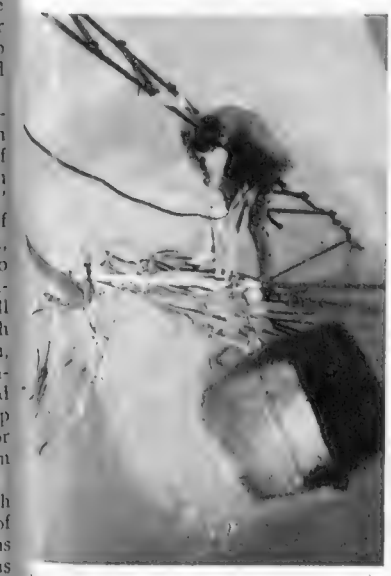
MEN OF THE R.A.N. TAKING STORES OUT TO THE "GATE" SHIPS, which are used to open a section of the net at stated times so that merchantmen may enter or leave the port freely

HE "HORNS" AT THE FORWARD END OF A BOOM-WORKING VESSEL. One of the huge buoys has been lifted from the sea to enable a shackle to be made fast

AFTER IT HAS BEEN WITHDRAWN FROM THE BOOM, a buoy is brought back by the working ship for repairs to be made on land

GERS EXAMINING THE NET which bars the harbour entrance. This shows a close-up of the "horns." Practically all the work on the net itself is done here

A SEAMAN EXAMINES THE "GATE" OF THE NET. Like all the other maintenance work, this is carried out by men of the Royal Australian Navy



ble Seaman cuts the wire stops on the net to allow it to hang down in the water properly

Knocking out a manhole cover, prior to repairs. The buoy has been brought in from the net

MEN OF THE ROYAL AUSTRALIAN NAVY who maintain the defences. These men were formerly civilians: they come from every part of the Dominion and are drawn from every profession

# NEWS from out of AFRICA

**RECRUIT TRAINING IN NORTHERN NIGERIA: Preliminary rifle sighting instruction on an open range for an Infantry Training Company.** All West African recruits are taught to become expert shots with the Service rifle standard throughout the British Army to-day. The recruits are all volunteers and come mostly from farms: they are of fine physique and average over 6 ft. in height. As most of them have very good eyes, they make good rifle shots. Like all Africans from Nigeria, they can stand the heat and humidity of the Tropics, and can sustain themselves without water for very long periods. They are also used to "head loads," and can carry 60 to 80 lb. over great distances without distress. Each recruit receives instruction from African sergeant-instructors who explain each step and stand by to correct any faults which may develop. In this picture recruits are seen lined up behind rifles mounted on rests: in turn each will sight the rifle on a fixed target. Nigerian Infantry played an important part in the successful East African campaign of 1940-41, giving fine infantry support to the South Africans. Many of them received awards for bravery under fire in this campaign

**THE G.O.C. NIGERIA AREA DIRECTS AN EXERCISE IN NORTHERN NIGERIA: Major-General E. B. B. Hawkins, who commands our forces in this theatre, has just held an exercise in which he acted as Director. His headquarters were established in open bush country near the village of Gude, 30 miles west of Kano City. Here he is seen at the telephone in the Operations Room at bush H.Q. Two clerks are dealing with the messages posted on the "In and Out" board on the left of the picture**

**TELLING THE GOLD COAST THE LATEST WAR NEWS:** Mallam Isa Katsina (on left) and Mallam Bello Kano making their broadcast to British West Africa from the Gold Coast Broadcasting Station at Accra. Broadcasting in African languages, Mallam Bello Kano has just put over a joke which Mallam Isa Katsina seems to enjoy and which will be gleefully repeated in West African market-places next day

**MR. J. B. WILSON, AN EXPERIENCED WEST AFRICAN TEACHER AND BROADCASTER,** who gives broadcasts daily in the Fante tongue. His people were among the first to benefit from the White Man's education more than a century ago. They well know that on the victory of the United Nations hang all their hopes as a people. Mr. Wilson obviously has no doubts of the outcome. He is an impassioned and eloquent broadcaster. In his zeal he has been known to seize the microphone and shake it. Technicians have to keep a close eye on him!

**TROOPS FROM THE BELGIAN CONGO ARRIVE IN THE MIDDLE EAST.** These Colonial troops are all volunteers from the Congo who have served five years with the Belgian Colonial Army. They are happy men, but they take their soldiering seriously, and for drill and discipline they would compare well with the Guards. All their officers and warrant officers are white men. The native troops have their own band and amuse themselves with their own songs and dances. Being educated in Army schools in the Congo, most of them are able to read and write. The Belgian Congo troops arrived at Port Tewfik and have now settled down to intensive training in their first camp in the Middle East

**AFRICANS OF ACCRA STOP TO LISTEN TO THE RELAYED BROADCASTS of the latest war news and special programmes in their own language.** Week by week, a number of men in the Gold Coast get together to discuss the job of keeping the Colony informed about the war. From the Gold Coast Broadcasting Station at Accra news and talks go out in English and six African languages. From the Information Office in Accra, Press hand-outs, films, mobile cinema units, posters, photographs, magazines and picture papers (in French, as well as in English) are issued to keep the local population abreast of all the news

# PICTURES OF HOME-FRONT SCENES

**ANOTHER, AND DIFFERENT, KIND OF R.A.F. RAID : Two airmen go prospecting for gulls' eggs at an English bomber station**

**THE RESULT OF THE RAID : Four more gulls' eggs are discovered in their nest in the gulls' colony.** These two men were both bricklayers in civilian life, and both came from Aldgate : one is now a runner in the Operations Room, and the other is fully trained for gas defence. After their meeting on the same Bomber Station, the two organised a "raid" on a gulls' colony in an adjoining marsh—with the result shown above

**BRITONS OF TO-DAY WORKING IN THE SAME WAY AS THEIR FOREFATHERS : The coracle-makers of Carmarthenshire.** Just as did their ancestors of 2,500 years ago, the present-day inhabitants of the village of Cenarth, in Carmarthenshire, use coracles for fishing. The man in the foreground is building a new one, of willow and hazel covered with calico and pitch. The few men who have not been called to active service from this village work hard from their ancient craft to net salmon : some of them work a nineteen-hour day on the Tivy River during the season

**LEADERS OF THE WOMEN'S LAND ARMY : Girls at the Burcott Lodge Farm School in Buckinghamshire, where they are undergoing a special overseer's training course.** After they have shown their mettle as ordinary land-girls, specially apt members of the W.L.A. are admitted by the Bucks. War Agricultural Executive Committee to the Burcott Lodge School for a special training course as overseers : here they learn all the intricacies of agricultural organisation. When they have passed their course, they become Grade A forewomen : they will then be able to tackle every agricultural job in hand—and also know something about Britain's vital post-war tasks. When their capacity for leadership has been proved, the Grade A forewomen direct parties in two parishes, as well as all other auxiliary labour

**A CASTLE IN SCOTLAND BECOMES A SCHOOL FOR NORWEGIAN CHILDREN : Folk-dancing in progress in front of Drumtochty Castle.** This big house is a famous landmark in Kincardineshire, surrounded by forests of fir-trees and hills. It has been acquired by the Norwegian educational authorities as a school for Norwegian children. Many of these came to Britain with Commando troops after raids on Spitzbergen and the Lofoten Islands and Narvik. They appear to be happy in their new Scottish surroundings, which are reminiscent of their own country

**TAKING THE TEMPERATURE OF A TUBE TUNNEL.** Engineers are taking the temperature of tube tunnels through which no train has ever run. They are collecting data on which they will plan new ventilation systems for the Underground railways. Moving trains, escalators and other machinery generate heat : as the Tube system has been extended, temperatures have been rising steadily. To combat this, more ventilating fans have been installed at many stations. A set of special electrical resistance thermometers is used in the tests. A small hole is drilled through the tunnel wall and three to four feet into the clay. The thermometer is inserted, and wiring from it is carried to the surface, where an instrument records the temperature. These tests will be made for many months. In the picture above an installation engineer is fixing one of the thermometers into a tunnel : it is connected by means of a special cable multipoint indicator situated at the top of the air shaft

The World of Books—By Vernon Fane

# BOOKS FOR ALL TASTES

*Harold Nicolson Runs the Ancestral Gamut; Mining and Farming in South America; The Tactics of Bomber Command; Lady Eleanor Smith's Romantic Gipsies; Aunt Julie's Will*

AN Irish rebel, vintage 1798, is as good a subject as another for the kind of biography, *en pantoufle*, at which Mr. Harold Nicolson is demonstrably skilled. That Hamilton Rowan was his great-great-grandfather adds verisimilitude, since Mr. Nicolson seldom writes more felicitously than when running the ancestral gamut. He adorns this particular shrine with an illustrious family-tree and with many nostalgic flashbacks to his own childhood. But, unlike the heathen Chinee, he abjures apotheosis. **THE DESIRE TO PLEASE** (Constable. 15s.) is a title taken from an epigram by Alain with which he skewers an Irish legend.

**A YOUNG RUSSIAN SINGER, Miss Daria Bayan,** who gave a rendering of the Arias from the rarely performed opera "Lucia di Lammermoor," with the London Symphony Orchestra under Sir Henry Wood at the Cambridge Theatre on Whit Monday. This artiste's excellent command of English is due to the fact that she was brought up in a convent run by English nuns at Tsingtao, near Shanghai. She had her first big London chance in 1941, when she played a leading role in "Sorotschinski Fair" at the Savoy Theatre: she has also sung for the B.B.C. and at concerts at the Stoll Theatre. In the autumn, she is to take the leading part in Strauss's "Three Waltzes"

"I cannot really understand," he says, "why an intelligent and independent nation should venerate the United Irishmen so deeply and so long." But he finds a partial explanation in the easy assumption that the Irish, "owing to their sensitiveness to legend, have small sense of history." Such lullibolerean sentiments would be enough to launch a thousand fights from Boston, Mass., to the Libyan Desert, but, lapped in the mellifluous urbanity of Mr. Nicolson's polished narrative, they do little but serve the purpose of debunking great-great-grandpapa.

For all that he is bracketed with Tone, Fitzgerald, Emmet and Tandy, Hamilton Rowan needs the researches of a diligent descendant to build him into anything more significant than a romantic Anglo-Irish type who went about looking for trouble, and, finding it, took an equal amount of trouble to get out of it. After his acquittal in 1805 he returned in pomp to Killyleagh, was received with plaudits by the populace, and spent the last twenty-five years of his life in uneventful seclusion.

The portrait reveals a handsome and amiable giant of a man whose weakness for self-dramatisation and love of a good scrap lead him into a movement in which he was content to be a transitory hero. But Hamilton Rowan is not all of the story, and I am not sure that he is the best part of it. Scraps of Mr. Nicolson's autobiography are the supporting theme, with tantalising vignettes of many climes and lands, and provocative opinions, such as "the cloying pages of the *Faerie Queene*."

In **GREEN FIRE** (John Murray. 12s. 6d.), Mr. Peter Rainier tells his own story of mining and farming in South America in the ten years or so before the present war. He was sent to Colombia in 1927 by an American syndicate to open up an emerald-mine in a valley remote from civilisation.

His existence was at first a prolonged fight with his employers for the life of the mine, and then a campaign against a tough number called Joaquin the Bandit. Almost unaided, Rainier imposed his will on the unruly Indians of the region. At length he held the wild country in the grip of one hand, while with the other he wrested the treasure from it. At this period he brought his wife and children out to Colombia.

At first Mrs. Ranier disliked the country, but when finally she grew to like it, it was she who inspired her husband to buy a 5,000-acre estate for the cultivation of coffee and tea.

The greatest difficulty lay in financing the venture. The working of the emerald-mine was abandoned, but the author obtained work from the Colombian Government when they opened up another such mine elsewhere. After some time at this, he worked as a free-lance engineering consultant in Bogota. The estate was just beginning to be a success when his wife died.

This is a bracing and adventurous story, very simply told, and reticent about family affairs, but it has far more shape and continuity than most autobiographies, with the charm of a pioneering family, the drama of the struggle against obstinate nature and violent enemies, and always the fascination of the emeralds.

**A FACE YOU MAY REMEMBER! Captain Clark Gable, the film star, in his new role as a gunnery instructor with the U.S. Army Air Force in England**

Before the war it was imagined that bombing could achieve vast destruction at little cost. Experience soon showed that it is one of the most difficult weapons to wield, and that the major obstacles are anti-aircraft defence, fighter-planes and weather. Britain was hamstrung for the opening years of this war by her very limited number of bombers. It was always the intention of Bomber Command to make large-scale attacks on Germany, but this was not possible while numbers were insufficient, and while other jobs had to be done.

The anonymous author of **BOMBER'S BATTLE** (Duckworth. 10s. 6d.), himself a Wing Commander, gives a lucid account of Bomber Command's three years of war. So far as this command was concerned, the war was a series of diversions at first—the Battle of France, the destruction of invasion barges, the blockade of Brest, mine-laying and so on. At last numbers were great enough for full-scale, all-out attacks on Germany's key cities and war industries.

The period of experiment ended with the first 1000-bomber raid on Cologne, proving the damage that can be done to an industrial city from the air.

The author is chiefly concerned with the larger issues of policy and the gradual evolution of the present strategy and tactics, but his book includes some brief and vivid accounts at first hand of what it feels like to be in a bomber making a raid. Altogether this is a solid, readable, comprehensive and conscientious piece of work.

If anything could convince me that the lives of gipsies are colourful, dramatic and adventurous, instead of what I think them to be, which is dull, it would be the writings of Lady Eleanor Smith. The syntax of that sentence may be involved, but its sentiments are impeccable.

Her latest novel, **CARAVAN** (Hutchinson. 8s. 6d.) is no exception to this rule of temporary enchantment. Its hero is the son of an Oxfordshire doctor, and has both French and Spanish blood in his veins. As a child he plays with the squire's daughter, Oriana, and she remains the love of his life. They do not marry, however, for she has decided only to wed where there are riches and great position, and he goes away to Spain, where the inevitable gipsies not only come into his life, but take charge of it.

He marries a gipsy dancer, but later, after she has been killed by a jealous bullfighter, he returns to England, where he once more meets his Oriana, now a wealthy lady of title. They find that their love is unchanged and have a short time of illicit and idyllic happiness till she goes to Switzerland with her dying husband and there meets her own end in a carriage accident. Her body is brought back to the country graveyard of her own village, and when her lover James dies some years later, he is buried next to her, and they are together at last.

The period of this romantic tale is the early nineteenth century, before the days when Victorianism could be held to mean everything that was repressive and sombre. It is told with immense vigour and verve, and for a few hours almost succeeds in transporting one, not only to a different world of manners, but to a state of mind which accepts emotion rather than reason as a basis for life.

The love of money is the root of evil for nearly all the characters in Miss Winifred Watson's novel, **LEAVE AND BEQUEATH** (Methuen. 8s. 6d.). Eight people meet in a comfortable country house for a particularly uncomfortable week's stay, during which there are deaths, murders and unlimited speculation about the contents of a will.

There should, I feel, be some kind of legislation to deal with prankish old ladies of Aunt Julie's type in real life, and even in fiction they are a trifle wearing. This example of the breed, before she is quite understandably gassed to death, has caused endless dissension between the members of her family and their wives.

Even her death fails to relieve matters, since her will is found after all to be equitably phrased, and the murderer profits no more than his two co-heirs. Murder in vain, in fact, which adds a practical reason to the more ethical deterrents to crime.

Miss Watson writes in a colloquial and easily absorbed style, and has, with no literary pretensions, the ability of telling a story.

**AN ANCIENT CRAFT WHICH STILL SURVIVES—making clay pipes at a 150-year-old workshop in Glasgow: smoothing off the finished pipes:** The ancient craft of clay-pipe making is still carried on at William White's, Cannon Gate, Glasgow, in a workshop at least 150 years old. It was to this same shop that Thomas Carlyle would send for "the best and biggest clay pipes at 3s. 6d. a gross." At benches where their predecessors discussed the Battle of Trafalgar and other news of the day over a century ago, nimble fingers of men and women expert in this skilled craft—for which at least seven years' apprenticeship is required—still make clay pipes for export to the Free World. The results of their handicraft are smoked by gold-miners in Africa and longshoremen in almost every country. All attempts to introduce modern machinery have failed, the same methods as those of a century ago being still in use at this workshop, which turns out over 1,000 different styles—from the Navy's favourite "jaw-warmer" to the long-stemmed "churchwarden"

## The Shaftesbury Homes and "Arethusa" Training Ship

The Duchess of Kent, who recently attended this Society's Centenary Thanksgiving Service, followed by a reception and presentation to the Chairman on his having given fifty years' invaluable service, said: "There is no better work ever done than to give poor children a chance of becoming healthy, happy and well-trained young citizens." Funds are urgently needed. 164, Shaftesbury Avenue, London, W.C.2.

SAVE ALL YOUR WASTE PAPER FOR SALVAGE

By Appointment

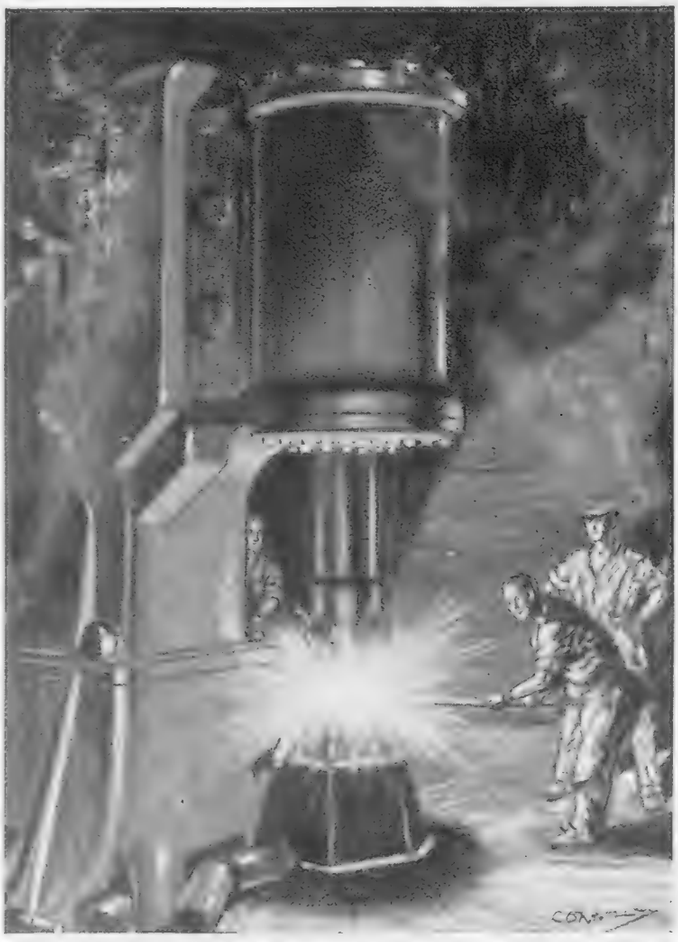
# STILL CARRYING ON

Although working under difficulties "Black & White" is still "carrying on"; still bringing to as many as possible the fine quality and mellow flavour which have made this grand old whisky a first choice everywhere.

# "BLACK & WHITE"

*"It's the Scotch!"*

# FORGINGS



A Forging Hammer at work in one of the Brockhouse factories

TRADE MARK

BROCKHOUSE

THE NAME THAT CARRIES WEIGHT

J. BROCKHOUSE & CO. LTD.

VICTORIA WORKS, WEST BROMWICH, STAFFS.

HOLDENS

***UNIFORM REGARD.*** It must stand up to foul weather; its shape must do credit to its wearer on all occasions; it must last long and be good-looking in its old age. That is how a uniform has to serve in wartime; and it can only do this if it is well cut by men with years of skill and experience. We have such men, and that is why our uniforms are sought by thousands of officers, men and women, in all the Services.

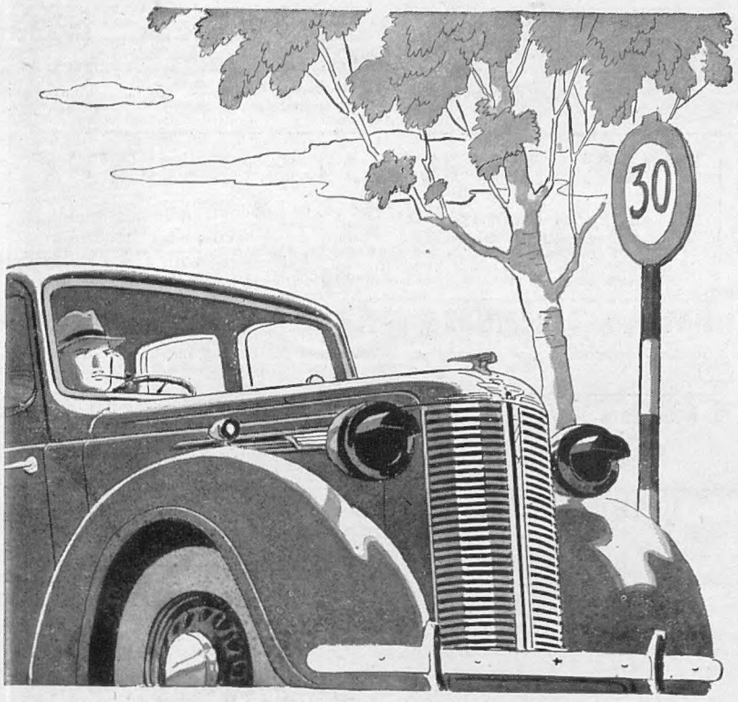
*Serge Reefer and Trousers from £9 . 10 . 0*

*Greatcoat . from £12 . 0 . 0*

***AUSTIN REED***

OF REGENT STREET

AND PRINCIPAL CITIES Telephone: Regent 6789




FROM AUSTINS TO AUSTIN OWNERS

## Ration yourself to 30 M.P.H. AND DOUBLE THE LIFE OF YOUR TYRES

Do you know that at 30 m.p.h. your tyres last twice as long as at 50 m.p.h.? In your own, and in the Country's interests, it pays to keep 'within the limit' even on the open road. If your work takes you over bad roads, reduce your speed still further. Running a tyre on a rough surface at the same speed as on a smooth one doubles the rate of wear. Uneven surfaces cause wheel spin and needless friction, while pot-holes taken at speed can easily fracture casings.

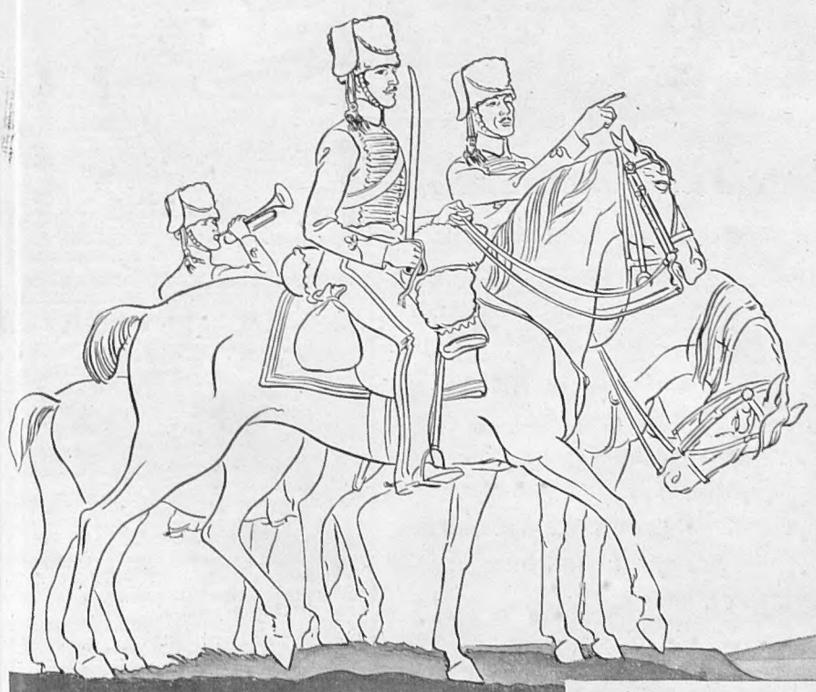
## Help your AUSTIN to help the Country

THE AUSTIN MAGAZINE MAY HELP YOU TOO—
*4d monthly from your newsagent*

THE AUSTIN MOTOR COMPANY LIMITED, LONGBRIDGE, BIRMINGHAM

2 G.196

FAMOUS QUEENS . . .



## HIGHLAND QUEEN

GRAND LIQUEUR
SCOTCH WHISKY

There are those to whom "HIGHLAND QUEEN" may be a name and no more. Tasting will reveal to them that this honoured name is, in fact, a symbol of the highest achievement. Tasting will show them that "HIGHLAND QUEEN" Grand Liqueur is *more than a name.*

MACDONALD & MUIR LTD.,
LEITH, EDINBURGH.

*Distilleries:*
Glen Moray-Glenlivet, Morayshire,
and Glenmorangie, Ross-shire.

18TH (Queen Mary's Own) ROYAL HUSSARS

The original regiment was raised in 1759-60 and in 1807 was equipped as Hussars. In 1821, however, it was disbanded and not re-formed until 1858. It was given its title 18th Queen Mary's Own Royal Hussars—when Her Majesty Queen Mary became its Colonel-in-Chief in 1910. Linked with the 13th Hussars after the war 1914-18.
Although for 37 years it was just a name, this regiment's record caused it to be re-formed and earn its present distinction and honoured name.

ESTB. 1742

WHITBREAD

& CO. LTD.

•

*Brewers of ale and stout for over two centuries*

•

# IN QUEST OF GOOD HOTELS

ADVICE BY ASHLEY COURTENAY

*Letters, accompanied by a stamped, addressed envelope for reply, should be addressed to him c/o The Editor, THE SPHERE, Commonwealth House, 1, New Oxford Street, London, W.C.1.*

**BOURNE HALL HOTEL, BOURNEMOUTH**

Offers shops, scenery and plenty of sunshine. Provides admirable quarters in a central position. Bridge, Billiards, Warmth and plenty of breathing-space. From 5 gns. Resident Directors: Mr. and Mrs. R. J. Bray.

**THE NORFOLK HOTEL**

**BOURNEMOUTH**

Traditional superiority. Combines all the factors that one expects to find in a first-class hotel, Restaurant, grill room, men's bar, Richmonde Lounge—the social rendezvous of Bournemouth—with The Norfolk Hotel Broadcasting Orchestra. Apartments each with P.O. telephone and most with private bathroom. Tel. 7272 every room. *Resident Directors:* Mr. and Mrs. F. J. McInnes.

**WALDRONHYRST, SOUTH CROYDON**

A residential hotel which provides safety and satisfaction, within ½-hr. of West End. But "seeing is believing." 'Phone—CROydon 2641, and arrange to view the 40 rooms, the 6 acres, the wealth of garden produce. Terms from 4 gns.

**CREST HOTEL, CROWBOROUGH, SUSSEX**

Interprets the dictionary definition of the word comfort: "To cheer, revive, ease, quiet enjoyment, freedom from annoyance, a subject of satisfaction."

**THE RED HOUSE**

**LEATHERHEAD**

Always very popular amongst Business and Retired people because of its accessibility to Town and its comfort. Vacant rooms are few and far between, but they are worth waiting for. Tel.: 2271.

**MOOR HALL HOTEL, NINFIELD, Sussex**

Here, 250 ft. up, facing due south, you can get a break from war routine. Fresh produce from our own farm and gardens. Fishing and rough shooting. Club licence. Trains met Crowhurst, Battle, or Bexhill. From 4 gns. Tel.: Ninfield 330.

**HEADLAND HOTEL**

**TORQUAY**

Though often full, it is an hotel to make a note of should you wish to enjoy quiet luxury midst peaceful surroundings. The Management will welcome advance enquiries.

**THE SPA HOTEL, ROYAL TUNBRIDGE WELLS**

*AND HERE IS PEACE . . .* An hotel of dignity and charm set in a healthy position 400 feet up, facing the sun and the South. Surrounded by 60 acres of parkland with sporting golf course. London under an hour by train. *Telephone: Tunbridge Wells 1911*

**GROVE HALL HOTEL, TWYFORD, Berks.**

I particularly recommend this hotel to those who have to journey to London daily. Only three-quarters of an hour from Paddington and two minutes' walk from the station. It's attractively situated in its own park, and every bedroom has its private bathroom. Tel.: Twyford 106.

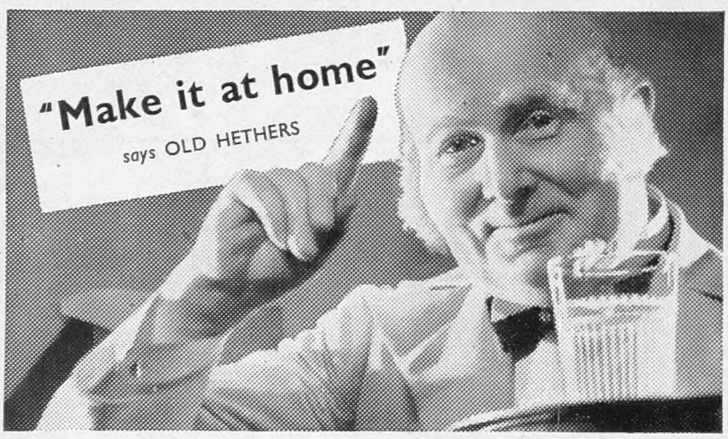
**THE OLD HOUSE HOTEL**

**WINDSOR**

There are occasional bedroom vacancies and always a chance of good food and good wine if you will but 'phone beforehand Windsor 1354. Luncheons 5s. Dinners 5s. and 2s. 6d. House charge.

*On active service on all fronts!*

**AERTEX**




"Lots of the younger folk only know my Robinson's Barley Water in bottles, and that, I'm sorry to say, like many other good things has been sacrificed to the war effort. But this doesn't mean you need miss your barley water. Do what I've done for years; make it at home from Robinson's 'Patent' Barley in tins. The flavouring's a bit of a bother, with no lemons, but necessity they say, is the mother of invention, so I've been experimenting. I've found that the juice from stewed or tinned fruit is first class. Some of my people use honey or jam, but there—it's everybody to their own taste, isn't it?"

**Barley Water** *made from*

**ROBINSON'S**

*'PATENT'* **BARLEY**

CVS—14

STOP THAT COLD WITH

VAPEX

INHALANT

For the safe, quick, pleasant relief of Colds and Catarrh

*Breathe the Vapour*

Of all Chemists 2/3

•

Thomas Kerfoot & Co. Ltd.

Vale of Bardsley, Lancashire

V222

**3d. each**

*including Purchase Tax*

"Eclipse" Blades (now made only in the popular slotted pattern) are scarcer than usual, but persistence in seeking them is rewarded with gratifying keenness and comfort in shaving.

*Obtainable only from Retailers.*

JAMES NEILL & CO. (SHEFFIELD) LTD.

**BREAST SUPPORTER**

*Trade Mark. Regd. Design Patents. Copyright Reserved.*

White material, For drooping, heavy figures. **59/6**

Loose Breasts, from **52/6**

Pink, Silk or Net, Detachable straps.

Very low back model, from **63/-**

*Please state Bust and Underbust measurements.*

JOUJOU GIVES UPLIFT and SUPPORT to FIRM or LOOSE BREASTS

INGENIOUS DESIGN for AMPUTATION

WITH & WITHOUT NURSE WITH COMFORT

TO PREVENT BREAST FROM DRAGGING, COLLAR-BONES FROM PROTRUDING, MUST WEAR JOUJOU BREASTS SUPPORTER. IT PREVENTS SORENESS, CHAFE AND STOOPING. GIVES UPLIFT. RELIEVES PAIN, INFLAMMATION, WHICH ARISE FROM NEGLECT. ALSO DESIGNED FOR MATERNITY AND NURSING MOTHERS. PREVENTS MILK CLOTTING. MUST BE WORN DAY AND NIGHT.

*Various prices for one's requirements and taste.*

FOR AMPUTATION. *Prices on application.*

**Joujou Breast Supporter with Pad.**

Personal fitting when calling or send your order.

Illustrated circular will be sent on receipt of 3d. Orders guaranteed immediately executed by return post.

Write or 'Phone Welbeck 1249 26643

*Obtainable only from—* Dept. SH.402

"JOUJOU" Co. 32 BAKER STREET, LONDON, W.1

PRINTED IN ENGLAND by THE ILLUSTRATED LONDON NEWS AND SKETCH, LTD., Milford Lane, London, W.C.2, and Published Weekly by ILLUSTRATED NEWSPAPERS, LTD., Commonwealth House, 1, New Oxford Street, London, W.C.1. SATURDAY, JUNE 26, 1943. Entered as Second-Class Matter at the New York (N.Y.) Post Office, 1903.

Major Oliver Stewart,
Editor of "Aeronautics,"
writes in the "Evening Standard":

*"I recently examined the details of a Miles M.28 Monoplane, a neat little machine intended for Royal Air Force light communications work, but eminently suitable for use as a private owner machine after the war . . . Here surely is an important hint as to what might be done with Civil Aviation after the war."*

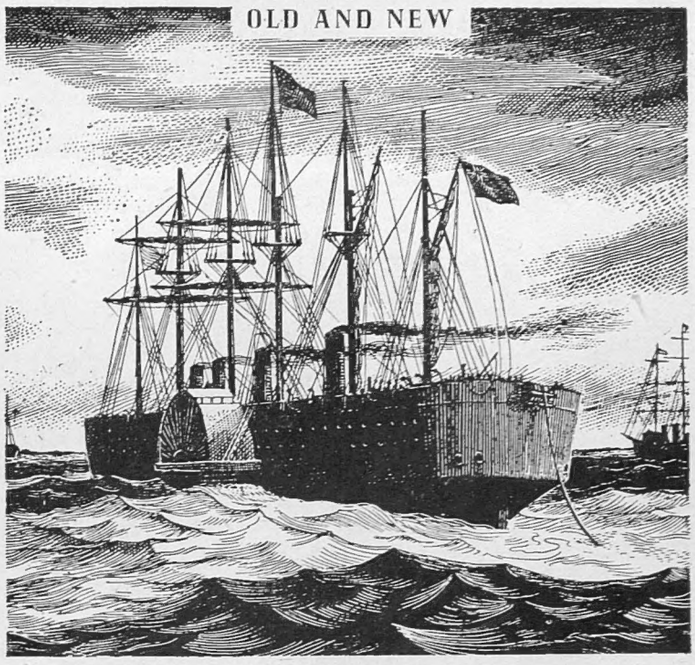
Miles
AIRCRAFT

PHILLIPS & POWIS AIRCRAFT LIMITED, READING, ENGLAND

M.15

COMMUNICATIONS

OLD AND NEW



THE ATLANTIC CABLE

THURSDAY, August 5th, 1858, was a day of rejoicing in Great Britain and America. The S.S. NIAGARA had steamed triumphantly into Trinity Bay, Newfoundland, carrying the first submarine cable to reach safely the other side of the Atlantic. But scarcely had the celebrations ended when the cable became dead.

**The Great Eastern**

Yet though the cable was speechless, the scientists were undismayed. Fresh projects were financed, and the famous GREAT EASTERN left London River—after a first unsuccessful attempt—on June 30th, 1866. Two months later the Atlantic cable spoke again. So began an unbroken era of cable communication.

**Distance Conquered**

Since those early days cable-laying has become a highly specialised industry. The overseas telegraph service of Cable and Wireless Ltd., represents the wonderful facilities of modern communication — facilities that have revolutionized world trade. The swift interchange of inexpensive messages '*via* Imperial' must always play a vital part in the promotion of international goodwill and understanding. The strain of wartime traffic is very great. While we cannot always give the same service as in peacetime, the Company and its staff are doing all that is humanly possible.

CABLE AND WIRELESS LTD

*The only British owned and operated Overseas Telegraph Company in this country*

C AND W

THE BURBERRY

THE WORLD'S BEST WEATHERPROOFS

***SERVICE KIT—Regular and Auxiliary.***
**Low charges for best work on Best materials. Agents in all towns.**

HAYMARKET, LONDON, S.W.1

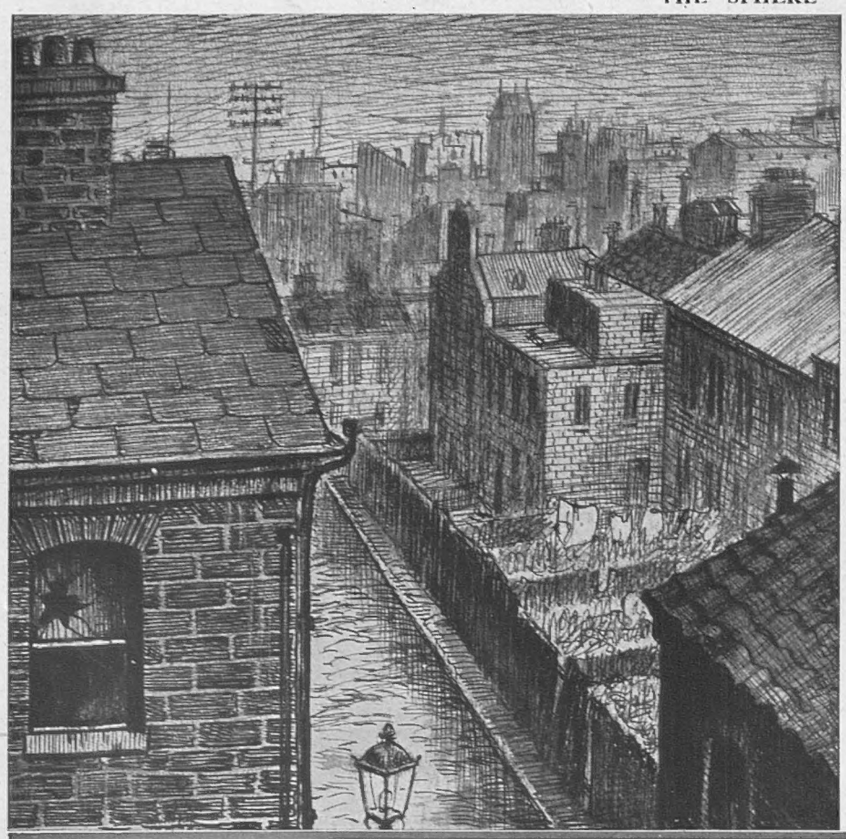
"WARDONIA"

SOLD BY

NAAFI

FOR BETTER SHAVES

SAUCEPANS MADE SPITFIRES—OLD BOOKS MAKE SHELL CASES. TURN THEM OUT NOW—THE NEED IS URGENT!



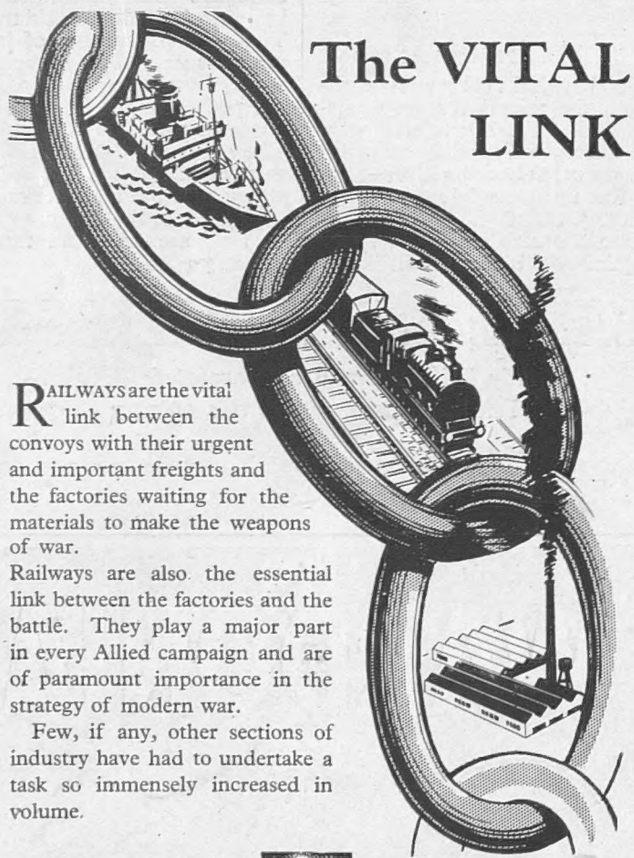
## The little grey home goes west

GREAT changes lie ahead. Congested streets will disappear, dark dwellings make way for widely spaced homes. It is the age of the technician. And a creative engineering undertaking such as The Nuffield Organization will have a vital influence on the life of the whole community.

*The*
**NUFFIELD ORGANIZATION**
A CORNERSTONE OF BRITAIN'S INDUSTRIAL STRUCTURE

Morris Motors Ltd., Wolseley Motors Ltd., The M.G. Car Co. Ltd., Riley (Coventry) Ltd., Morris Commercial Cars Ltd., S.U. Carburetter Co. Ltd., Nuffield Mechanizations Ltd., Nuffield Tools and Gauges Ltd., Morris Industries Exports Ltd.

## The VITAL LINK



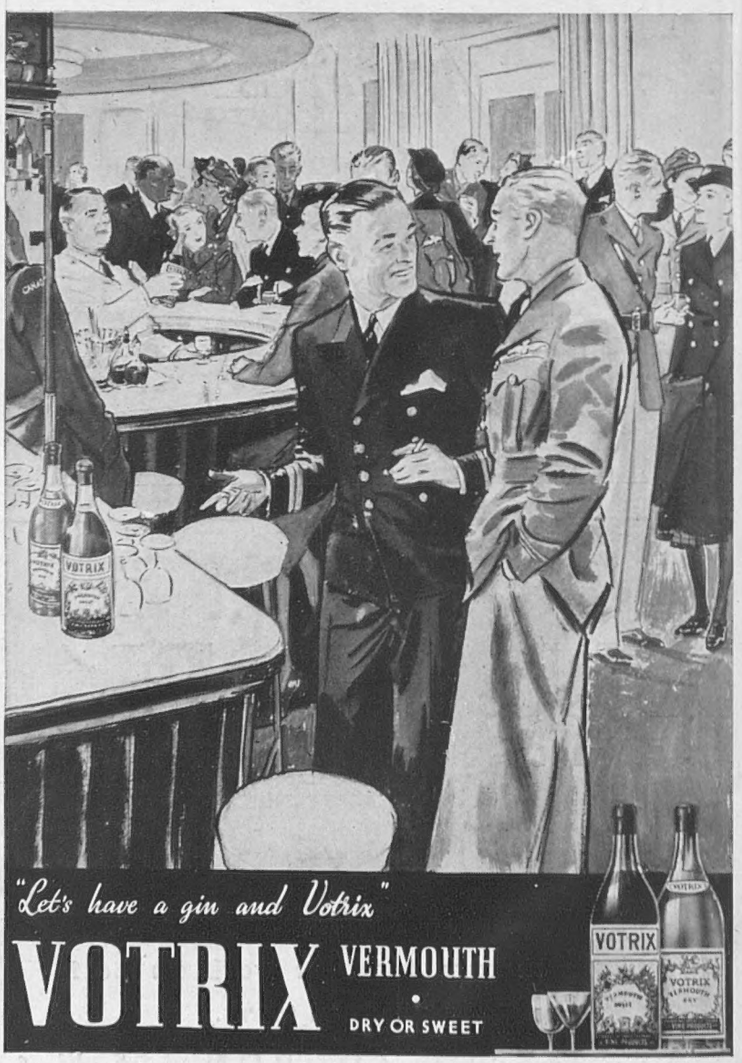
RAILWAYS are the vital link between the convoys with their urgent and important freights and the factories waiting for the materials to make the weapons of war.

Railways are also the essential link between the factories and the battle. They play a major part in every Allied campaign and are of paramount importance in the strategy of modern war.

Few, if any, other sections of industry have had to undertake a task so immensely increased in volume.

**BRITISH RAILWAYS**
GWR · LMS LNER · SR

*Carrying the War Load*




*"Let's have a gin and Votrix"*
**VOTRIX** VERMOUTH
DRY OR SWEET


PRINTED IN ENGLAND by THE ILLUSTRATED LONDON NEWS AND SKETCH, LTD., Milford Lane, London, W.C.2, and Published Weekly by ILLUSTRATED NEWSPAPERS, LTD., Commonwealth House, 1, New Oxford Street, London, W.C.1. SATURDAY, JUNE 26, 1943. Entered as Second-Class Matter at the New York (N.Y.) Post Office 1903.